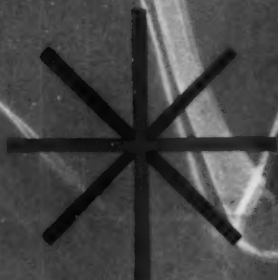


# MODERN PACKAGING



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*The hosiery industry  
looks to packaging  
to win display spots  
for impulse sales*

**FEBRUARY 1961**



## A very simple way to reduce freight bills

Use a dry glue. And stop paying freight on water—which can account for 65% of liquid glue weight! National's AQUA-FLAKES start as a complete liquid dextrin adhesive that is ready-for-use. Then the water is removed without impairing the high quality of the glue. AQUA-FLAKES are shipped dry. When the user replaces the water all of the original adhesive qualities are retained.

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STARCHES



**National**

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# MODERN PACKAGING®

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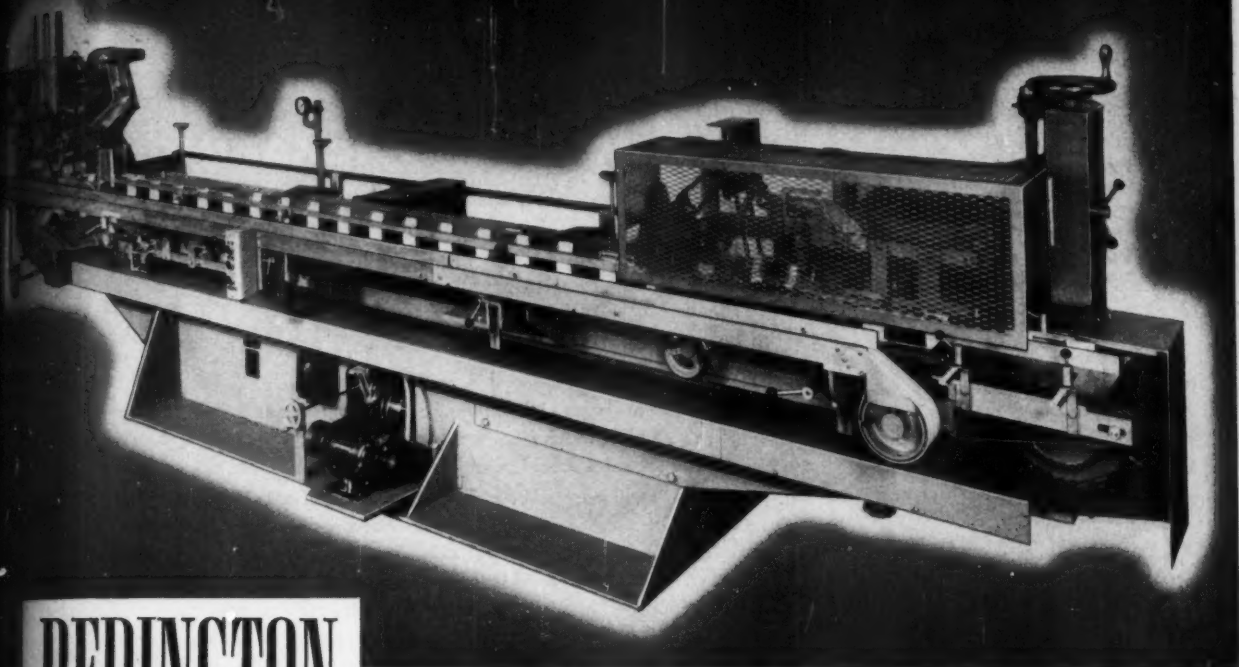
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## MODERN PACKAGING

### The way to find out

Is the customer always right? Does he really know what he wants the package to be? The H. J. Heinz Co. went to considerable trouble and expense to find out and the story should be of interest to every packager.

For years the difficulty of getting ketchup out of a bottle has been a favorite vaudeville joke and (perhaps with some cause-and-effect relation) almost the first thing that any consumer will bring up when the conversation turns to packaging. Why, thousands of letter writers have asked, can't they put ketchup in a wide-mouth jar, like jelly, so we can spoon it out?

Heinz, like other ketchup producers, has a file full of such letters. They haven't gone unheeded. Over the years there have been changes in neck diameter, in closure, in product consistency—all designed to make the ketchup dispense more freely. But there were several good reasons why Heinz did not want to abandon necked bottles altogether—including some serious doubt as to whether the public as a whole would give up the traditional package.

So, several months ago, Heinz decided to find out. Two handsome wide-mouth jars were designed and produced: one a 10¼-oz. size shaped like the Heinz mustard jar, the other a globe-like shape holding 8¼ oz. Simple labels were designed to be easily removed, if the housewife desired, for table service. Heinz ketchup in these two containers was test marketed for three months in Pittsburgh and Detroit alongside the conventional bottle.

The result? The old reliable bottle outsold the jars by no less than 17 to one and as high as 33 to one over the three months. The best result was obtained in the first month, when the preference for the old package was only seven to one. Popularity of the jars actually declined steadily as shoppers became more familiar with them. In the entire three months only one customer wrote the company in praise of the jar package.

Naturally, the jars have been withdrawn.

What lesson can be drawn from this? It would be a great mistake to conclude that the packager knows best and that consumer criticisms are always ill advised. Even in this case, there were factors that may have influenced rejection of the jar, including a higher per-ounce cost due to higher production costs, difficulty of store display of a squat package and—as the company well knew—quicker darkening of the ketchup after opening, due to the greater surface area.

The point is that Heinz laid it on the line and let the consumer see and decide.

## The Editors



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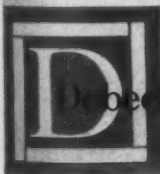
i **D**ea at work...



## Dobeckmun helps Johnson's Wax merchandise BLEM\*

...save money too. When Johnson's Wax wanted to promote the sale of Pride by enclosing free packets of BLEM in Pride\* cartons, Dobeckmun helped create a brand new packaging idea to handle the job. That's Dobeckmun's business—creating ideas. Metalam® packages are perfect for paste or liquid products. They will not leak. They pack well, save space and are so economical to fill they can save thousands of dollars on a big job, as they did for Johnson's. And, the attractive, bright Metalam package helps build sales. This is Dobeckmun's kind of an idea—at work. A Dobeckmun idea can work for you—get in touch with the Dobeckmun office nearest you.

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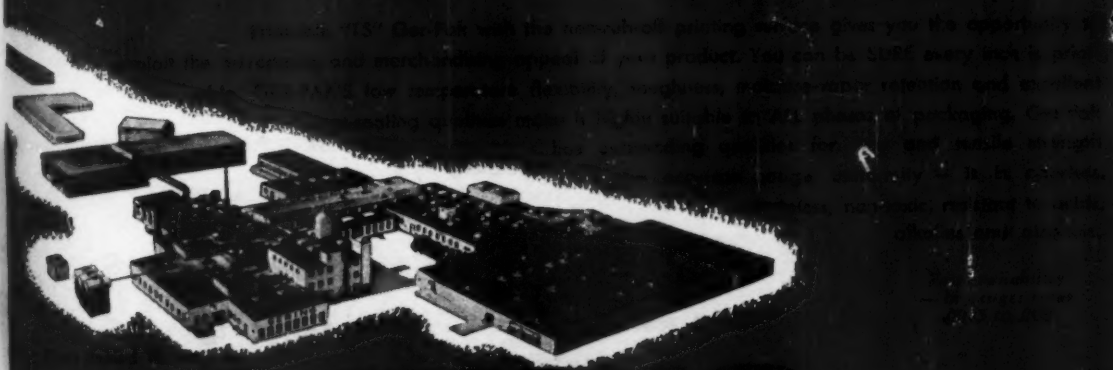
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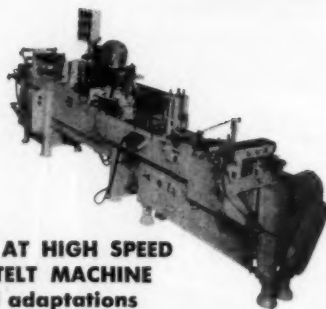


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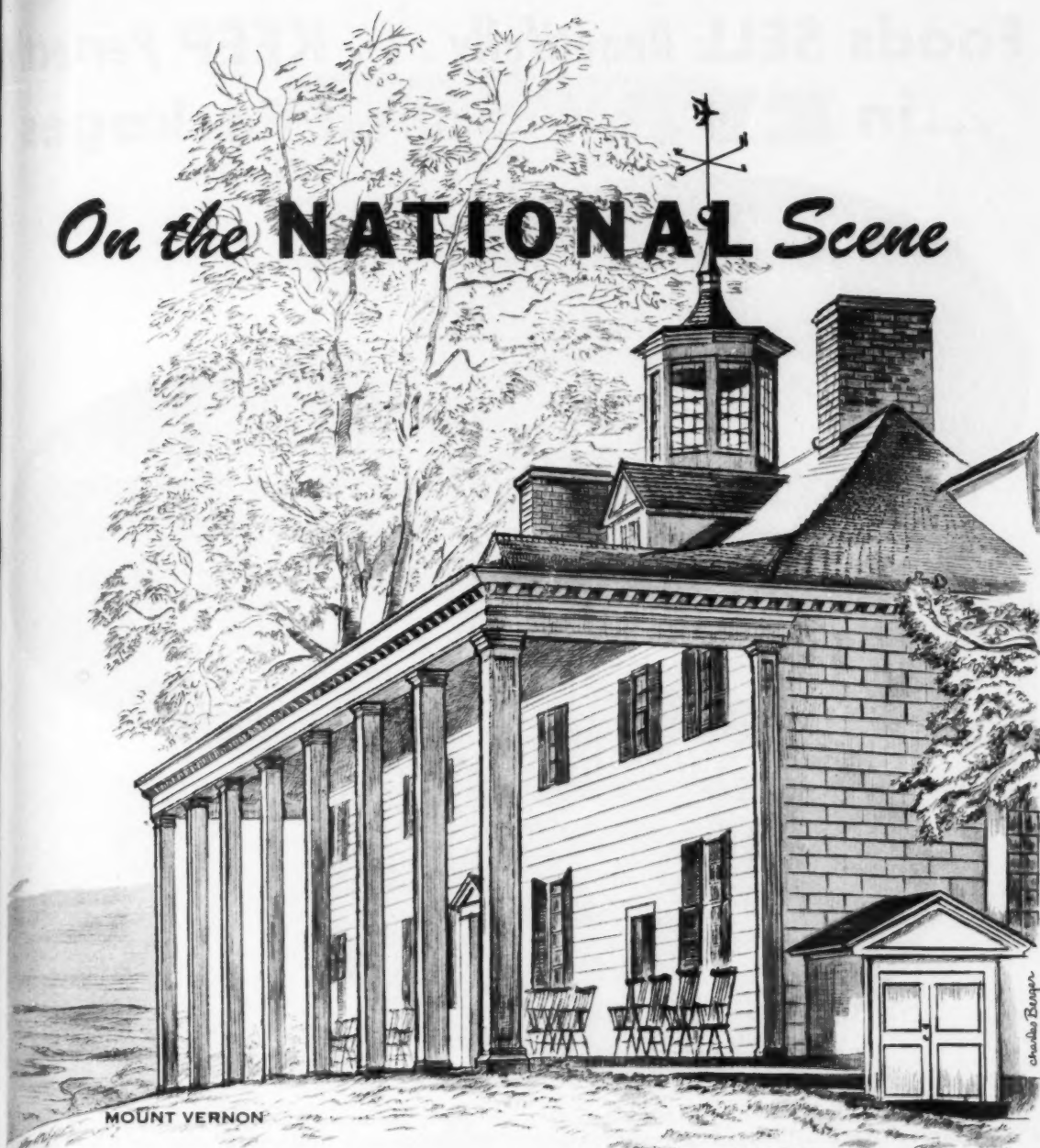
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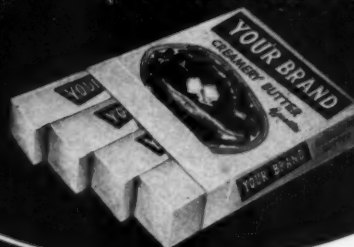
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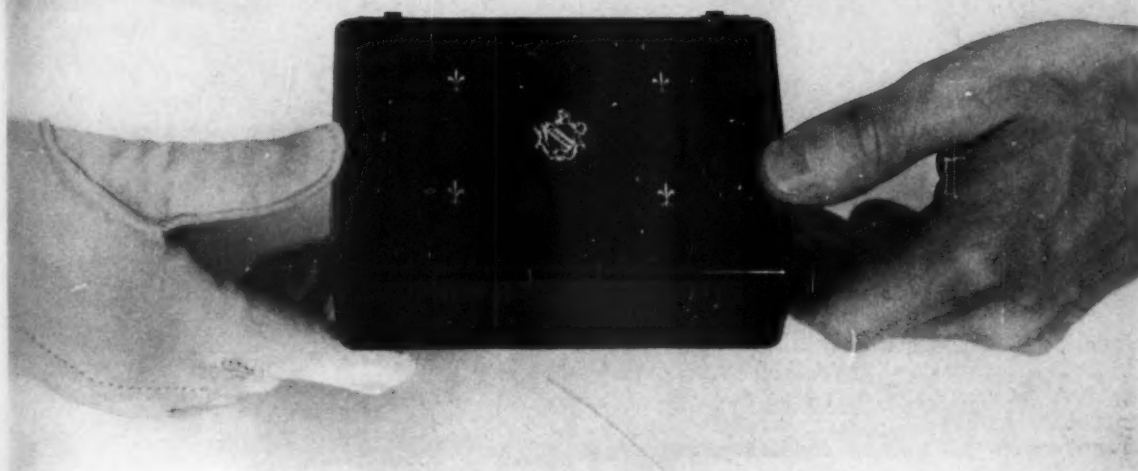


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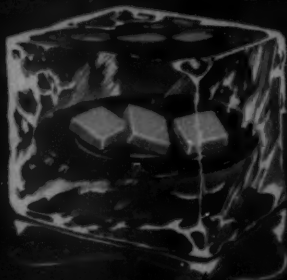
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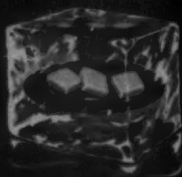
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KRAFT'S PARKAY  
4 QUARTERS

PARKAY

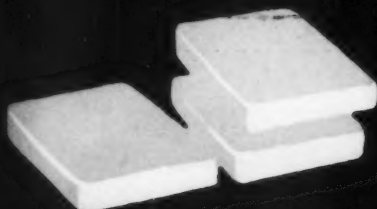
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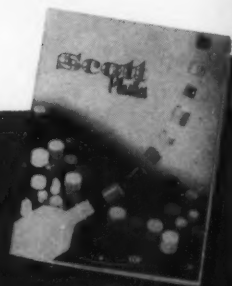
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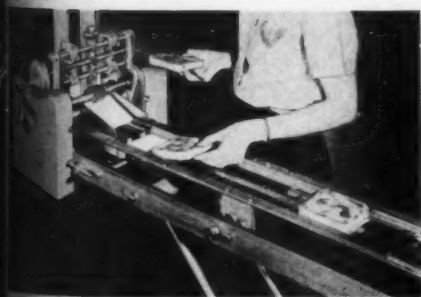
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MEAD RESEARCH created this HH Corrugating Medium to help containers combat the ravages of high humidity. Much of the extra rigidity of HH Board remains at even 90 per cent relative humidity, giving containers higher compression top-to-bottom and end-to-end. As more and more commodities are stored and shipped in refrigeration, this is a vitally important addition to all the other qualities which have made Mead Chestnut corrugating medium famous and a favorite throughout the years. Whether you are the container maker or the shipper whose customers demand that food be delivered odorless, it will pay you to get all the facts about the efficiency, safety and economy of Mead odorless new HH Corrugating Medium.

Mead Board is a standard product of

### THE MEAD CORPORATION

Sold direct by MEAD BOARD SALES, INC., 3347 Madison Road, Cincinnati 9, Ohio

CHICAGO 30, ILLINOIS.....	6124 N. Milwaukee Avenue
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Koppers Company, Inc.  
Dept. MPG-26, Chemical Division  
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Please send me a free copy  
of your Directory of Plastic  
Packaging Suppliers.

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1956 edition...

Plastic



KOPPERS COMPANY, INC.

## JUST OUT!

### ...1956 EDITION OF KOPPERS FREE DIRECTORY OF PLASTIC PACKAGING SUPPLIERS

New and enlarged, this Directory includes suppliers who use expandable polystyrene, and polyethylene as well as polystyrene. It is compact and readable and fits in your pocket.

- ...**lists** all plastic packaging suppliers alphabetically according to city and state.
- ...**tells** who stocks standard size packages and containers — gives dimensions and types of plastics used.
- ...**shows** who will supply plastic packaging to your specifications.

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Sales Offices: NEW YORK • BOSTON • PHILADELPHIA • ATLANTA • CHICAGO • DETROIT • HOUSTON • LOS ANGELES  
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FEBRUARY 1956

•  
**HIGHER  
 PRODUCTION  
 WITH LESS  
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 •



## **DUSENBERY MODEL 610 AUTOMATIC SHEAR CUT OR SCORE CUT ROLL SLITTER AND REWINDER**

**FOR CASH REGISTER, TELETYPE AND ADDING MACHINE ROLLS, GUMMED TAPE, ETC.**

The Model 610 is the first automatic machine utilizing the three drum winding principle necessary for the production of hard, evenly wound rolls with flat smooth sides.

It will produce rolls equal or better in quality to those you are now making on your manually operated three drum slitters. The Model 610 requires one operator plus the necessary packers. Due to the automatic features incorporated in the machine, we can hold to nine seconds or less, the time between stop and start. With a running speed of 1,000 FPM, the actual winding cycle can be held to a minimum.

To estimate the increase in production over your present methods, add nine seconds to your winding cycle to get the time of a complete spindle from stop to stop. Compare

this time against the stop to stop cycle you are now running on your present machines.

At the present time, the slitter is standard in widths up to 42", and will rewind to 9"

The Model 610 comes complete with a variable speed all-electric drive, pre-set controlled acceleration, an air operated constant tension unwind, built-in trim disposal unit, automatic gluing and cut-off unit, mandrel hopper, etc. The slitter will wind with or without cores. Automatic core loading can be supplied as optional. If coreless winding is required, an air operated mandrel stripper can be furnished. diameter on a minimum core diameter of  $\frac{7}{8}$ ". For other widths and diameters, consult our engineering department.

**JOHN DUSENBERY COMPANY, INC.**  
**275 GROVE AVENUE, VERONA, N. J.      Tel: Verona 8-3915**

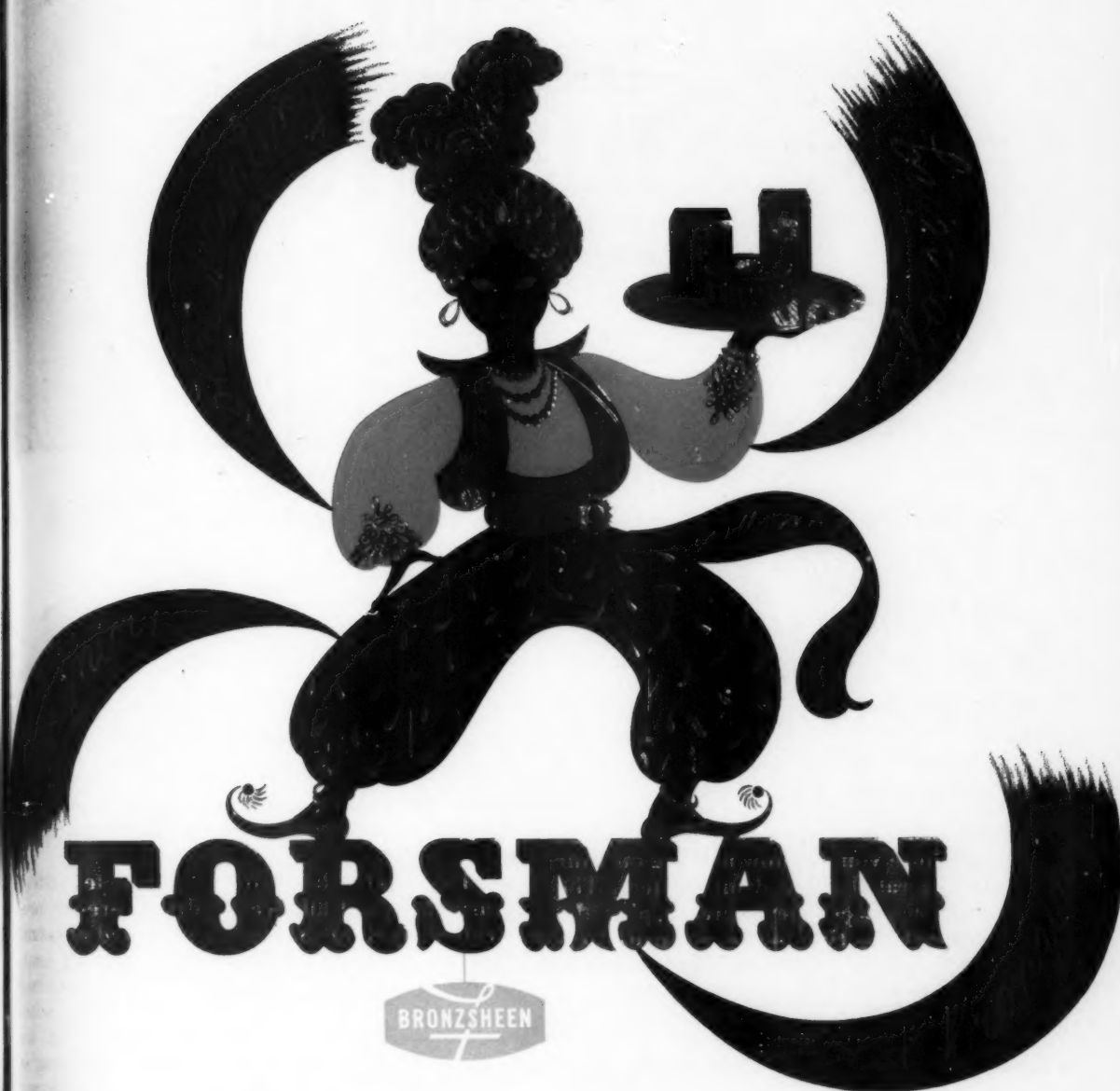
MANUFACTURERS OF:

SLITTERS, WINDERS, CONSTANT TENSION UNWINDERS, KNIVES, LEVERS, SLEEVES  
 SPECIAL CONVERTING EQUIPMENT DESIGNED TO MEET YOUR PRODUCTION PROBLEMS



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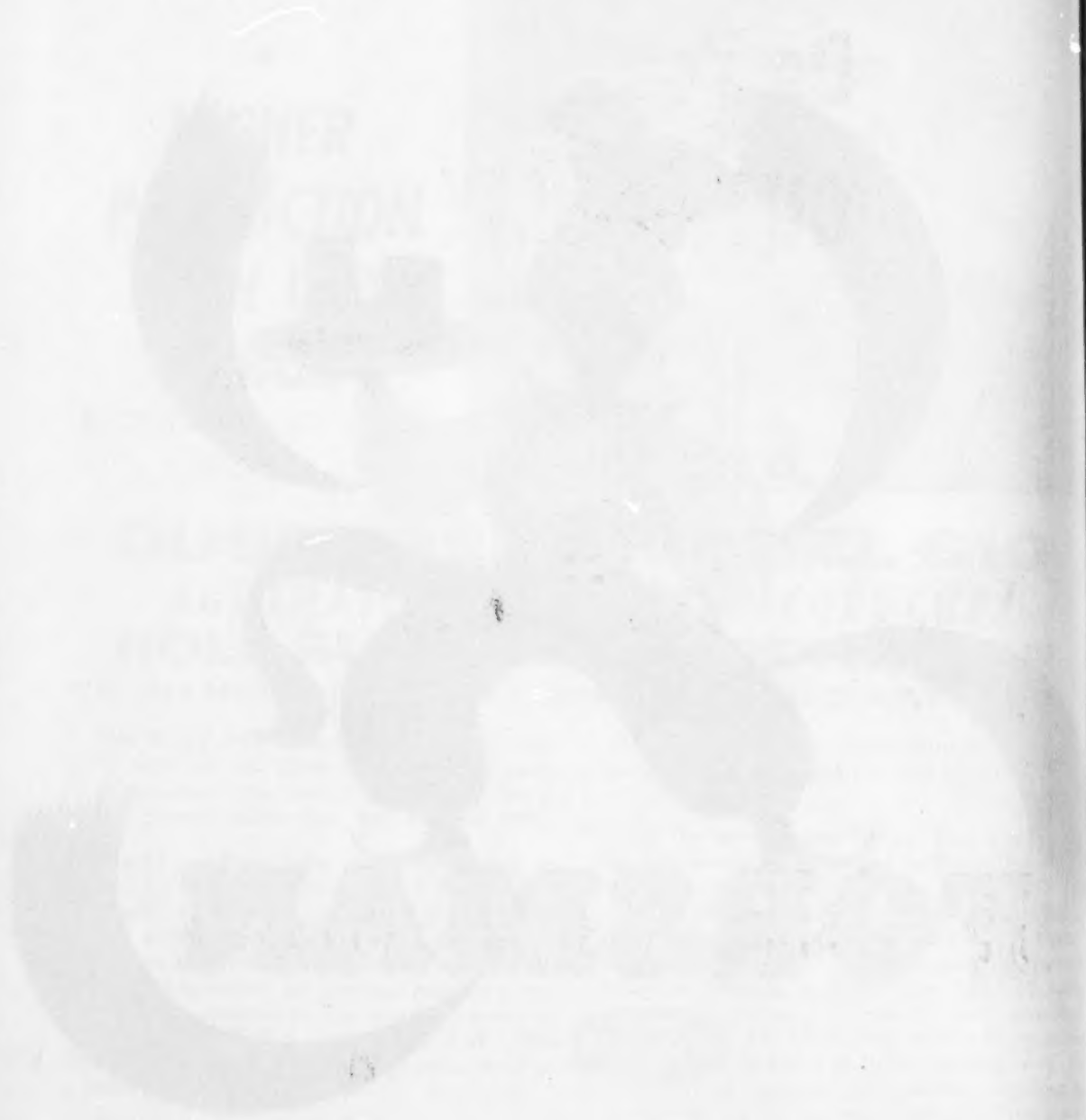
EMS  
CKAGING



FORSMAN'S Research Laboratory, after years of experimentation, has developed **BRONZSHEEN**... the nearest possible approach to Foil in appearance, and considerably more reasonable in price. **BRONZSHEEN** adds quality to your packaging. **BRONZSHEEN** in brilliant colors is on its way. FORSMAN'S Creative Staff can assist you in your packaging developments.

*Forsman* FOR PACKAGING

C. H. FORSMAN COMPANY  
318 WEST THIRTY NINTH STREET • NEW YORK 18, N. Y.



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# Do You CUT or SLIT...

PAPER

CELLOPHANE

ACETATES

SYNTHETICS

FOILS, FILMS

PROCESSED FABRICS

or . . . anything that comes in rolls?

If you are not *already* using a Beck Automatic Roll Sheet Cutter or a Beck Razor Blade Slitter, chances are you're losing money.

Why not investigate the possibility of putting a Beck machine to work for you . . . and . . . save money!

Beck machines cut practically anything that comes in rolls . . .

*accurately . . . quickly . . . economically.*

WRITE:



**CHARLES BECK MACHINE CORPORATION**  
20 CHURCH ROAD, KING OF PRUSSIA, PA.

*Pacemakers since 1864 in the ENGINEERED APPLICATION of SHEET CUTTERS and SLITTERS*

**CROWN**

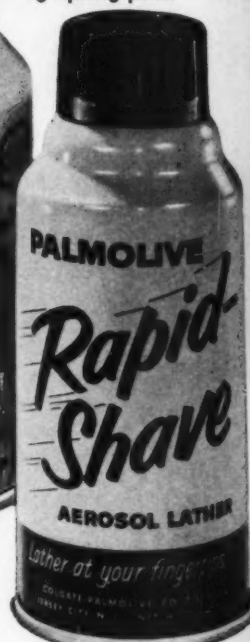
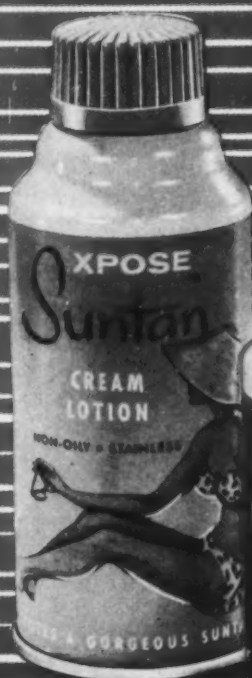
**SPRA-TAINER**

**UNIVERSALLY RECOGNIZED FOR  
PACKAGING SUPERIORITY**

Depend on Spra-Tainer for outstanding achievements in aerosol packaging. For example, in the last Chemical Specialties Manufacturers Association competition, Spra-Tainer-packaged products won first awards in no less than four classifications!

Reasons for Spra-Tainer leadership:

- ✓ Seamless can construction
- ✓ Art and design service now available to Crown customers
- ✓ Can decoration in the world's newest and best equipped metal lithographing plant



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C.S.M.A. First Award  
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Colgate-Palmolive Co.,  
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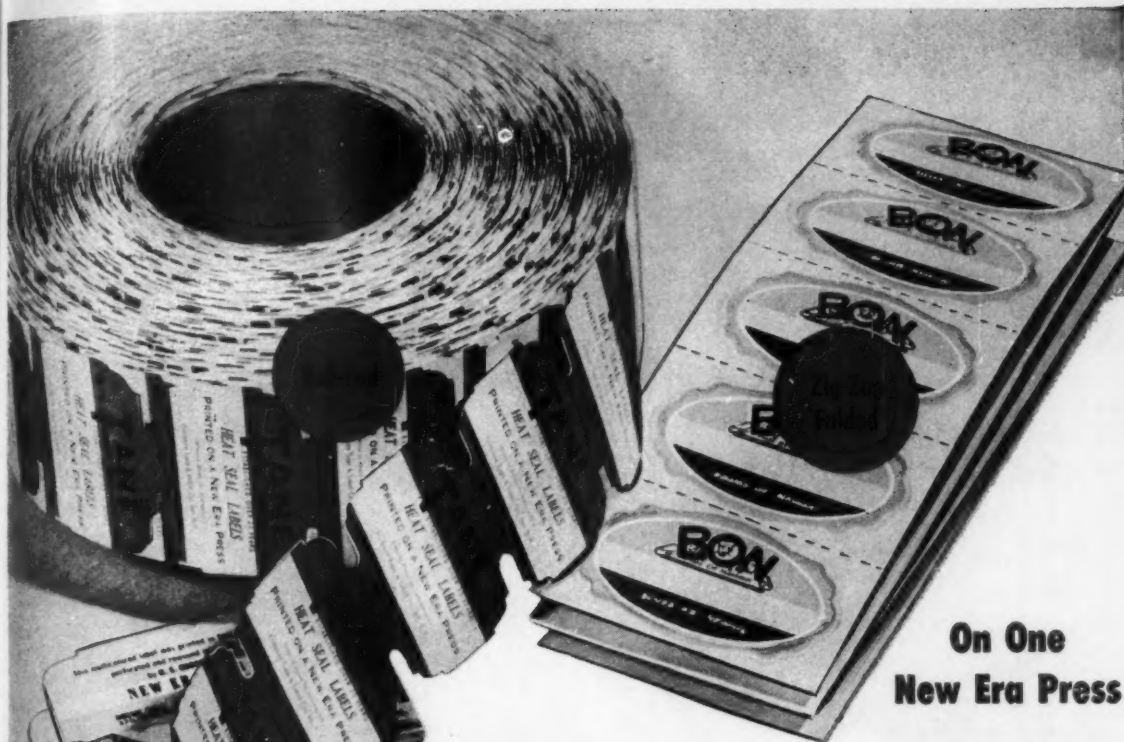
*Choose for Packaging Progress*

For more Crown sales representatives about  
aerosol packaging and design, contact for Crown.



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On One  
New Era Press

## Every Type of Label Completed in One Run

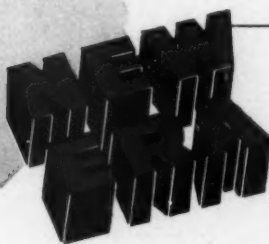
HEAT SEAL—PRESSURE SENSITIVE  
Gummed—Ungummed—Silk—Cotton

Every type of label, using any type of label material, can be completed in a single run on one New Era Press at speeds to 7,500 *impressions* per hour.

Your free copy of the New Era Bulletin shows you how the New Era Press is set up to print on any type of label material with flat electros, type or rubber plates—how it die-cuts any square, rectangular, or odd-shape label . . . slits, perforates, and numbers . . . delivering the finished labels in rolls, zig-zag folded or individually cut off—all in a single run. Write for your copy of the New Era Bulletin today.



Bag Headers, Merchandise Tags, Etc.  
The products shown are only a few  
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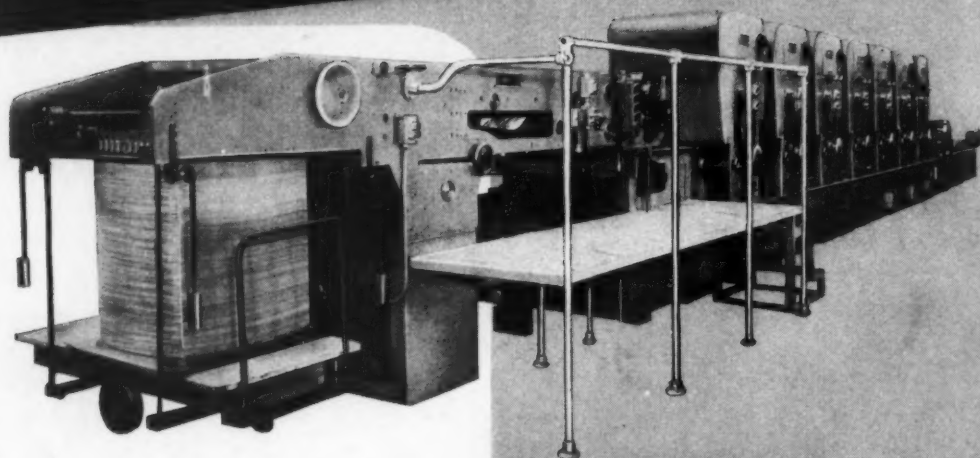
**Manufacturing Company**

371 Eleventh Ave., Paterson, New Jersey

# NOW!

## A ROTOGRAVURE PRESS

that Delivers Sheets **1 1/2** Times Faster!



**NOW**—for the first time—you can take advantage of the high speed of modern rotogravure presses for label and wrapper printing. Improved Champlain Sheet Delivery—operating inline with a Champlain Rotogravure Press—delivers square-cut sheets with 1/64" accuracy 1 1/2 TIMES FASTER THAN ANY OTHER STANDARD SHEETER!

Standard Sheet Size	Glassine & Paper Backed Foil		Light Paper		Heavy Paper & Cardboard		Max Width	Max Length	Min Length
	ft. Per Min.	Sheets Per Hr.	ft. Per Min.	Sheets Per Hr.	ft. Per Min.	Sheets Per Hr.			
10	100	1000	100	1000	100	1000	100	100	100
12	100	1000	100	1000	100	1000	100	100	100
14	100	1000	100	1000	100	1000	100	100	100
16	100	1000	100	1000	100	1000	100	100	100
18	100	1000	100	1000	100	1000	100	100	100
20	100	1000	100	1000	100	1000	100	100	100
24	100	1000	100	1000	100	1000	100	100	100
30	100	1000	100	1000	100	1000	100	100	100
36	100	1000	100	1000	100	1000	100	100	100
42	100	1000	100	1000	100	1000	100	100	100
48	100	1000	100	1000	100	1000	100	100	100
54	100	1000	100	1000	100	1000	100	100	100
60	100	1000	100	1000	100	1000	100	100	100
72	100	1000	100	1000	100	1000	100	100	100
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108	100	1000	100	1000	100	1000	100	100	100
120	100	1000	100	1000	100	1000	100	100	100
144	100	1000	100	1000	100	1000	100	100	100
168	100	1000	100	1000	100	1000	100	100	100
192	100	1000	100	1000	100	1000	100	100	100
216	100	1000	100	1000	100	1000	100	100	100
240	100	1000	100	1000	100	1000	100	100	100
270	100	1000	100	1000	100	1000	100	100	100
300	100	1000	100	1000	100	1000	100	100	100
360	100	1000	100	1000	100	1000	100	100	100
432	100	1000	100	1000	100	1000	100	100	100
504	100	1000	100	1000	100	1000	100	100	100
576	100	1000	100	1000	100	1000	100	100	100
648	100	1000	100	1000	100	1000	100	100	100
720	100	1000	100	1000	100	1000	100	100	100
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1008	100	1000	100	1000	100	1000	100	100	100
1152	100	1000	100	1000	100	1000	100	100	100
1296	100	1000	100	1000	100	1000	100	100	100
1440	100	1000	100	1000	100	1000	100	100	100
1680	100	1000	100	1000	100	1000	100	100	100
1920	100	1000	100	1000	100	1000	100	100	100
2160	100	1000	100	1000	100	1000	100	100	100
2400	100	1000	100	1000	100	1000	100	100	100
2700	100	1000	100	1000	100	1000	100	100	100
3000	100	1000	100	1000	100	1000	100	100	100
3600	100	1000	100	1000	100	1000	100	100	100
4320	100	1000	100	1000	100	1000	100	100	100
5040	100	1000	100	1000	100	1000	100	100	100
5760	100	1000	100	1000	100	1000	100	100	100
6480	100	1000	100	1000	100	1000	100	100	100
7200	100	1000	100	1000	100	1000	100	100	100
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10080	100	1000	100	1000	100	1000	100	100	100
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360000000	100	1000	100	1000	100	1000	100	100	100
432000000	100	1000	100	1000	100	1000	100	100	100



## *H.E.B. Stores Report*

# **PROVEN SALES INCREASES**

*with these* **dixie designed wrappers!**



Mr. M. H. Martin, Corpus Christi, Texas, Manager of Bakery Operations for the 65 modern H.E.B. Super Markets in Texas states:

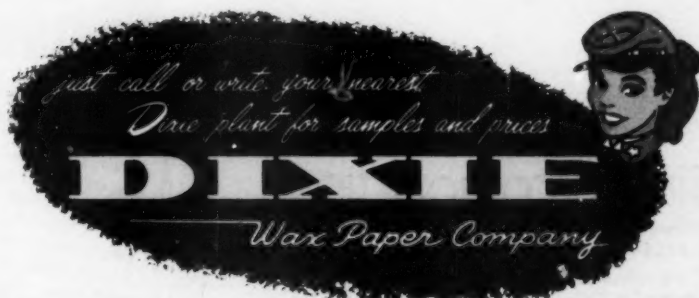
"Our new Dixie designed bread wrappers were greatly responsible for immediate and continuing sales increases in our Bread Department."

You have a fast-selling, sales appealing wrapper when your product is presented in a Dixie designed package.

Take the story of H.E.B. bread wrappers, for example. The H.E.B. Food Stores, with 65 locations throughout South Texas, came to Dixie's Packaging Specialists for aid in designing and producing a new line of bread wrappers.

The result? Immediately when the new Dixie designed wrappers hit the market, sales jumped . . . and have continued to climb beyond their expectations.

This is but one example of the sales effectiveness of a Dixie designed package, planned and produced by Dixie's team of Packaging Specialists.



DALLAS, TEX. • MEMPHIS, TENN. • WASHINGTON, N. J. • BURLINGAME, CALIF. • MEXICO, D. F.



# NOBODY HAS AS MUCH EXPERIENCE AT MOLDING POLYETHYLENE AS

# TUPPER!

The logical molder for you to consult regarding that product or package of yours which is to be made of polyethylene is Tupper. Tupper has done more than any other molder to make molded polyethylene a practical reality.

Aside from having designed, patented, and promoted successful seals, closures, and dispensers for polyethylene containers, the Tupper Corporation has vast experience in *every phase* of polyethylene packaging and polyethylene injection molding. This experience will be of major importance in improving your product, in reducing your costs, when Tupper goes to work for you.

Tupper's combination of experience, technical ingenuity, and the most modern equipment is at your service for the custom molding of your product in polyethylene. You can do no better than the best ...and the best at molding polyethylene is Tupper!

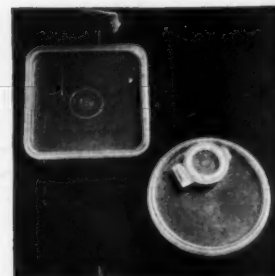
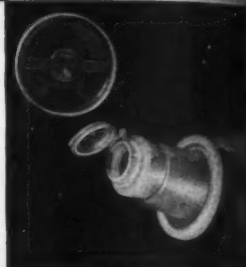
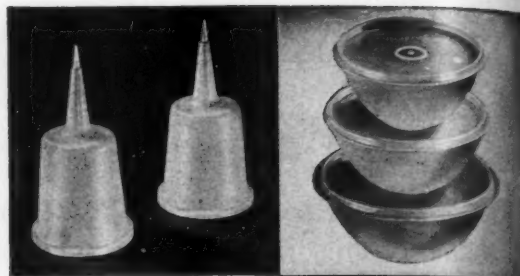
**TUPPER!**  
TRADE MARK

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Manufacturers of — CONSUMER, INDUSTRIAL,  
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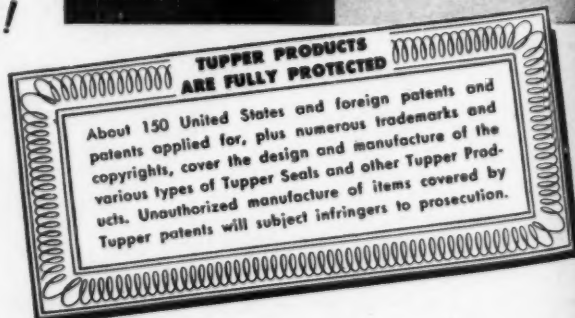
Address all communications to: Dept. MP-2



Tupper Seals are air and liquid-tight flexible covers. The famous Pour All and Per Top covers are designed for easy dispensing. They are made in sizes to fit all Tupperware containers.



When equipped with Tupper Seals, Tupper Canisters, Sauce Dishes, Wonder Bowls, Cereal Bowls and Funnels in various sizes are the most versatile reusable containers you have ever seen.





# Now, Two Cost-Saving F. & D.A.-accepted Plasticizers

*for cellulose...*

## Compare PFIZER CITROFLEX\* A-2

(Acetyl Triethyl Citrate)

The Food and Drug Administration has now accepted CITROFLEX A-2 for use in plastic food wraps—like the cellulose acetate food packages you see here. Non-toxic and odorless, CITROFLEX A-2 is accepted for both *fatty and non-fatty foods*. Most important to you, the cost of this citric acid ester is remarkably low, compared to other nontoxic cellulose acetate plasticizers.



*for polyvinyls...*

## Compare PFIZER CITROFLEX\* A-4

(Acetyl Tributyl Citrate)

CITROFLEX A-4 is also nontoxic, odorless and accepted by the F.D.A. for use in plastic packaging of *either fatty or non-fatty foods*. You can use CITROFLEX A-4 to plasticize vinyl films for meat wrapping...vinyl coatings for food containers...vinyl plastisols for bottle crown liners, food jar sealing rings and "safe teething" vinyl toys. Compare the cost of efficient CITROFLEX A-4 with other F.D.A. accepted vinyl plasticizers.

Besides A-2 and A-4, the Pfizer CITROFLEX line includes CITROFLEX 2 (Triethyl Citrate), CITROFLEX 4 (Tributyl Citrate) and CITROFLEX A-8 (Acetyl Tri-2-Ethylhexyl Citrate). Check into the Pfizer CITROFLEX plasticizers today. Mail the coupon below.

\*CITROFLEX is a trademark of Chas. Pfizer & Co., Inc.



Manufacturing Chemists for Over 100 Years

**CHAS. PFIZER & CO., INC.**

Chemical Sales Division

630 Flushing Ave., Brooklyn 6, N. Y.

- ☐ Please send me Technical Bulletin 31 on Citroflex Plasticizers
- ☐ Please send me a sample of CITROFLEX A-2
- ☐ Please send me a sample of CITROFLEX A-4

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Branch Offices: Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Tex.

# NEW! SCHRADER



★ Designed exclusively for foam

★ Rapid pressure filling makes loading easier

## 10 Reasons Why PRESFOAM is best for Dispensing

- "Ribbon" pattern dispensing . . . easier to use . . . reduces waste
- Better wiping action—vertical opening designed to fit the hand
- Positive locking
- Positive direction . . . no "flying" foam
- Positive shut-off
- Even flow rate . . . every time!
- No extra cover to replace . . . easy and economical to assemble
- Resistant to corrosion . . . stainless steel and all plastic—no rubber or rubber-like materials
- Attractive appearance . . . various color combinations available
- Schrader-made parts . . . Schrader assembly . . . Schrader 100% inspection . . . Schrader reliability backs each valve

The ideal foam valve is available for your forward planning. Now in the all-new Schrader PRESFOAM Valve you get the answer to today's and tomorrow's competitive foam dispenser problem: *Customer satisfaction*. Here's a valve designed with you and your customer in mind. *For you* it means faster filling since this is a rapid pressure filling valve that'll load fast! It's attractively designed—handsome, all plastic—no rubber—combined with corrosion-resistant stainless steel spring, available in combinations of colors to match your requirements. And what's more—every valve is backed by Schrader's unexcelled research and development facilities. *For your customer*, PRESFOAM means ribbon-pattern foam that's easier to use.

Get set with PRESFOAM—the all new foam valve that's designed exclusively for your foam needs.

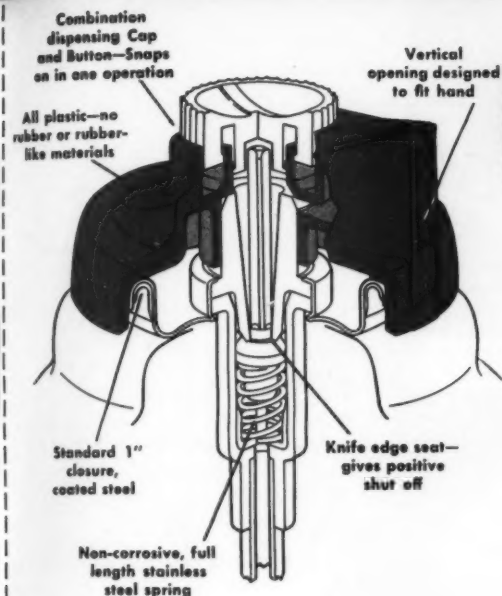
# Schrader®

ESTABLISHED IN 1844

AEROSOL and FOAM VALVES made by

the leading producer of Standard Tire Valves

# ER Presfoam VALVE



## INSIDE STORY OF PRESFOAM

Take a closer look at this stellar performer. The all-new PRESFOAM offers stainless steel spring and all plastic construction—no rubber components. Button part of dispensing cap—that means no plastic threads to strip. And see, too, a minimum number of parts make up this valve—less chance of failure in use. It's economical for you to use. Remember: the same quality inspection methods you'd expect on any Schrader Product—are used on the new Schrader PRESFOAM Valve.



**SCHRADER #840 PRESFOAM VALVE**—for all foam type dispensing. Supplied in 1" closure with draft tube assembled. When ordering specify make and ounce capacity of can so right draft tube length can be furnished. Dispensing opening  $\frac{3}{4}$ " x  $\frac{1}{4}$ " vertical. Other openings to meet your specifications. Ribbon pattern. Positive wiping action. Positive direction. Coated steel closure—stainless steel spring and all plastic—no rubber components. Pressure filling type. Available in various colors. Priced competitively. Samples on request. Backed by the good name of Schrader.

**A. SCHRADER'S SON**  
Division of Scovill Manufacturing Company, Incorporated, Dept. MP  
470 Vanderbilt Avenue, Brooklyn 38, N. Y.

I am interested in full information on your PRESFOAM VALVE

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

MAIL THIS COUPON

TODAY

# AVISCO\* BANDS

*Sell as  
they Seal  
and Protect*

Let us show  
you how—

## AGENTS

### WEST COAST

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683 Bryant Street  
San Francisco, CALIFORNIA

### MIDWEST

Continental Glass Company		L. S. Kaufman and Sons, Inc.
841 West Cermak Road		3615 Orange Avenue
Chicago, ILLINOIS		Cleveland, OHIO

### SOUTH

R. P. Anderson		C. V. Nunemacher
925 North Solomon Place		523 Marion E. Taylor Building
New Orleans, LOUISIANA		Louisville, KENTUCKY

S. W. Scott and Son  
608 McCall Building  
Memphis, TENNESSEE

### SOUTHWEST

R. P. Anderson  
2503 West Mockingbird Lane  
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### METROPOLITAN NEW YORK

J. Rabinowitz and Sons, Inc.  
2 Hanson Place  
Brooklyn, NEW YORK

\*Trademark of American Viscose Corporation

American Viscose Corporation, 350 Fifth Avenue, New York 1, N. Y.



## Background

## for

## packaging

Notes,  
quotes  
and comments

In this new department, the editors of MODERN PACKAGING have joined forces to bring you the kind of sidelight information that may help to bring month-to-month developments in packaging into better perspective. Look for it each month in this same location.

**More income** per family magnifies the marketing significance of steadily rising U.S. population. In the last five years, says *Kiplinger Letter*, there has been an 80% increase in the number of families (now 15.7 million) having income in the \$5,000-\$10,000 range, while number of incomes over \$10,000 has increased 90%. Joint ANA-AAAA report sees average family income up to \$7,000 within 10 years, with a one-third betterment in general standard of living.

**Merger wave** continues in the packaging field with the big materials suppliers tending more and more to absorb the smaller converters. Note in the last month the absorption of Chester Packaging Products by St. Regis Paper, Durethane Corp. by Koppers, Flexible Packaging Co. by Bemis Bag, Foil Kraft, Inc., by Kaiser Aluminum. There will be more.

**Price drop** on vinyl resin—a chop of 4 cents by Bakelite—is going to throw this plastic into more serious competition in the packaging field. Since physical and chemical drawbacks of vinyl have been largely eliminated, as far as packaging is concerned, the slight price disadvantage has been its biggest handicap.

**A new packaging field** of tremendous size is opening up with the surprisingly quick acceptance by the meat industry of the Swift & Co. conclusion that quick freezing and packaging at the source offers the packers' best means of brand-name merchandising of fresh-cut red meats. (See "Swift's Frozen Meats Bid," Dec., 1955, p. 88.) Consensus of a panel at American Meat Institute annual meeting was that 30 to 50% of all meat sold fresh cut today would be in packers' packages in the frozen-foods case within five years. Last year fresh-meat sales were \$4½ billion. If frozen meats reach more than \$1½ billion they will be bigger than the entire frozen-food industry today.

**Shortage** again in cellophane. All sources are reported weeks to months behind orders and have put all users on allocations based on previous usage. Best hope for relief is opening of Olin's new Indiana plant, scheduled for July. *Note:* Cellophane producers have raised export price about 5%, to bring them in line with domestic prices.

**Advertising themes** more than ever are keyed to the package. Designers for the Gunther Brewing Co., Baltimore, came up with a striking gold label background, which they felt would best express the flavor of clear, golden, dry beer. (See *Today's Beer Labels*, Nov., 1955, p. 102.) The agency boys took it from there and are now sparking a successful campaign with the slogan, "Get in the 'Golden Mood' with Gunther." The Gunther packages and promotions, incidentally, won 13 prizes—more than any other brand, at the Brewers Assn. of America convention.

**Be prepared** for new criticism of the cost of packaging, as a result of Secretary of Agriculture Benson's latest explanation of the widening gap between farm income and food prices. The secretary points to processors' added costs for the built-in convenience features demanded today in packaging as well as product.

**Non-food items** in the supermarkets will ring up \$225 million in sales this year, as against \$185 million last year, according to *Philip N. Kane*, president of the American Rack Merchandisers Insti- [Please turn page]

tute, who points out that today more than 87% of all supermarkets carry housewares and other non-grocery lines, compared to 10% five years ago.

**How big** can supermarkets get? One going up in Fort Wayne, Ind., is so big that a high school football team used it as a practice field last fall. Its 80,761 sq. ft. will sell not only foods, but hardware, tropical fish, shrubs and flowers; the parking lot covers 10 acres. Another, in New Orleans, advertised as the "world's largest" will cover 189,000 sq. ft. and park 1,600 cars.

**Plastic-lined crowns** for beer and beverages were a subject of discussion at the recent Miami bottlers' convention. A vinyl-lined crown has been tested and is now commercially available at a cost said to be in the same range as cork, although it has not yet reached large-scale commercial use. In the offing is another corkless version using a ring of polyethylene over a foil disk. The objective of the plastic developments is not only to make the beverage industry independent of foreign cork supplies, but to get away from the sealing variables inherent in cork.

**Department stores** want more and better packaging by manufacturers, see great opportunities for faster, better service to compete with discount houses. In a survey just completed by National Retail Dry Goods Assn. and Folding Paper Box Assn., store executives cited numerous examples of how good packaging upped sales, cut costs. They made numerous specific suggestions as to package sizes and styles, which box makers will take into account.

**Piggy-back deals** are affected by a Federal court decision in Los Angeles, holding that Chun King Sales, Inc., has a valid patent on its method of taping two cans together end to end to sell as a single unit. (See "Chun King Sells—and How," Oct., 1955, p. 130.) Chun King was awarded damages and an injunction against Oriental Foods, Inc., of Los Angeles. Packagers producing any kind of taped-together deal will want to check this decision.

**Plastic containers** of the rigid transparent type continue to grow in the food field. Examples of whopping sales gains for such food products as prepared salads, cottage cheese, sherbets and ice cream after switching to a transparent container have overcome many packagers' doubts as to the cost and re-use desirability of plastics. At least one-fourth of the country's ice-cream makers are reported to be packing one or more items in plastic containers.

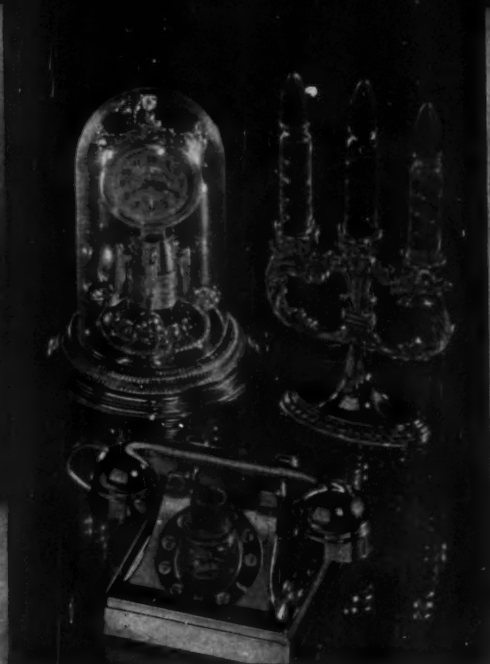
**Box score** on the rapid shifting of variety stores to check-out self service with its important implications for packaging (see "Check-Out at the 5 & 10," Oct., 1955, p. 97,) has been published by *Variety Store Merchandiser*. One chain, Sprouse-Reitz, has all 275 stores on full self service. Woolworth has 387 check-out stores, Newberry 84, Kresge 62, McLellan 45, McCrory 36.

**Multiple packaging** of canned foods in paperboard carriers gets intensive study in an experiment now being conducted jointly by the National Canners Assn. and Container Corp. of America in seven Philadelphia supermarkets of American Stores Co. All brands of five different canned foods (vegetables, fruits, milk, soup and fish) will be test-sold in three different packages in multiples of three, four and six. Test in each store will last seven weeks and involve seven different ways of stocking shelves. Cost as well as sales data will be compiled.

**Background**

**for**

**packaging**



## *Catalin* HIGH IMPACT *Styrene* ... Perfume's Guest at a Miniature Masquerade Party\*.

Only through repeated handling and re-use adaptation will the proud possessor continue to appreciate the strength and longevity of these seemingly delicate miniatures. In each container, beneath the surface masquerade of showy glitter, lies the sinewy molded support of CATALIN High Impact STYRENE!

For this offering, the *gem of plastics* details itself exquisitely in the form of an endearing anniversary clock — a 3 candlette-abra — a model telephone — and a regally romantic coach. For all four creations, CATALIN STYRENE exemplifies spectacular packaging and merchandising.

Though fully able — through its own colorful beauty — to have participated unmasked, CATALIN STYRENE is so much a party to this dazzling promotion's success as to enjoy a chance to attend masqueraded. Thus does it better serve ingenious industry.

\*Molded by Fenco Mfg. Co., Akron, Ohio  
for the Benjamin Ansel Company, St. Louis 21, Mo.

**CATALIN CORPORATION OF AMERICA**  
ONE PARK AVENUE • NEW YORK 10, N. Y.



In addition to Styrene and Polyethylene Molding and Extrusion Compounds, Catalin chemical products include a wide range of Urea, Phenolic, Cresylic, Resorcinol, Melamine and Styrene Resin formulations

*They do everything  
but  
jump off the shelf...*

## **Bags made of NIBROC<sup>®</sup> white!**

At the very heart of today's supermarkets, the point of sale, bags made of Nibroc White—millions of them—really have sales jumping.

**They stand out!** Clean, brisk, bright printing is their dish! For you and your customers, they mean faster sales of your coffee, flour, rice, dog food, or whatever!

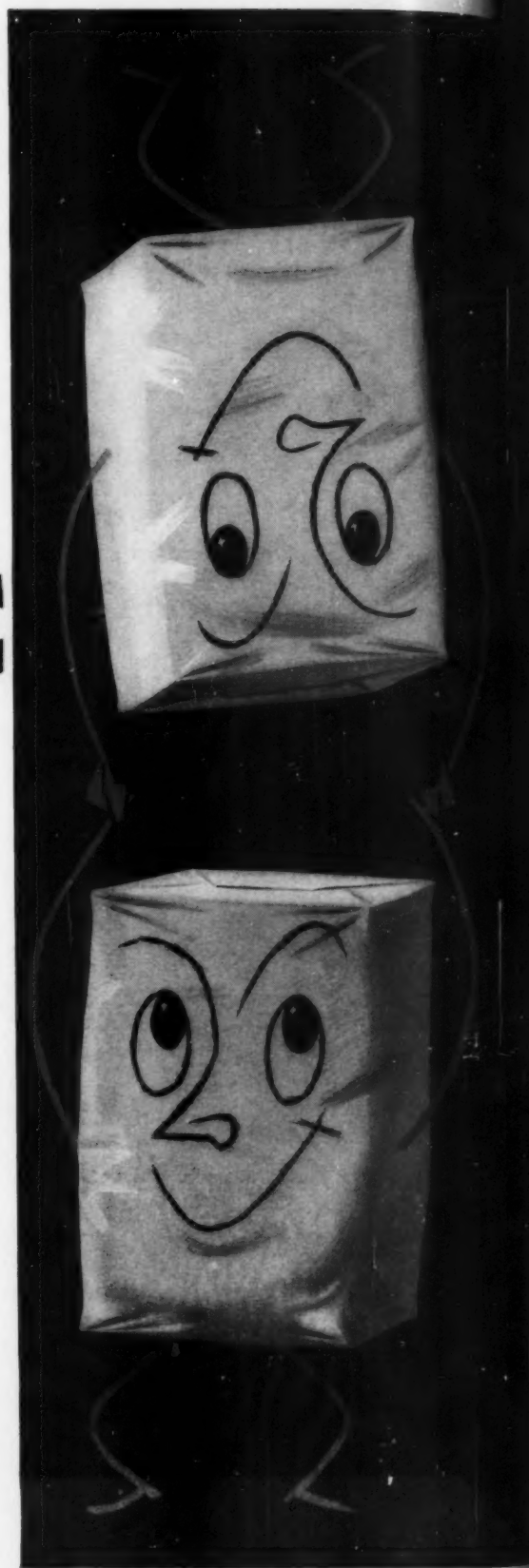
**They're stronger!** From the grocer's shelf all the way home to the pantry, tough-yet-flexible Nibroc White bags safeguard their contents—deliver your products fresh and sound.

Our customers will make any bag you desire from Nibroc White. For samples and more information, write or phone our *Paper Sales Division*, Dept. RD-2, our *Boston office*.

**BROWN**  **COMPANY**  
Berlin, New Hampshire

*General Sales Office:* 150 Causeway Street, Boston 14, Mass.

SOLKA PULPS • SOLKA-FLOC • NIBROC PAPERS • NIBROC TOWELS  
NIBROC KOWTOWLS • NIBROC TOILET TISSUE • BERMICO SEWER PIPE  
AND CONDUIT • ONCO INSOLES • CHEMICALS





KEY  
YOUR PACKAGING  
TO TODAY'S  
MARKETS...

USE

*Cochran*

for eye catching appeal  
and product protection





## YOUR KEY TO MODERN MARKETS

CASE after case is proving foil packaging to be the key to sales successes in today's highly selective consumer markets.

Gleaming bright Cochran aluminum foil captures the attention of impulse-buying customers and bespeaks the freshness and quality of the product inside.

★ **As foil manufacturing specialists**, we can help you in the selection and application of foil and foil products to solve your packaging problems.

★ **For the modern merchandising** of bakery products and pre-cooked frozen foods there's a full line of rigid foil packages and closure equipment.

★ **Cochran plain and laminated foils** for cartons, packets, bags, labels, closures are available in a wide selection for your every packaging requirement. We do not make packages nor print, but we work with all companies who do.

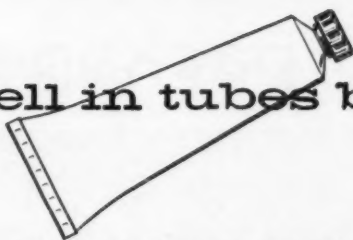
*For information on our facilities available to you, write Cochran Foil Company, Incorporated, Department F-2, 1430 S. 13th Street, Louisville 10, Kentucky*



**Cochran** **FOIL COMPANY**  
Incorporated

**FACILITIES AS FLEXIBLE AS FOIL ITSELF**

pack and sell in tubes by WIRZ



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## WHEN IS A WIRZ TUBE NOT A TUBE?

When it becomes the jacket for Burgess miniature dry batteries . . . vital components in portable transistor radios, hearing aids and similar electronic devices.

Burgess Batteries with unique wafer-cell construction are outstanding in performance and are a *standout* in appearance. They are "packaged" in lightweight, aluminum jackets economically fabricated from Wirz collapsible metal tubes.

A tube by Wirz may prove the unique container for your product.  
Discuss your application with a Wirz representative.

*Write us today about your special packaging needs*



**COLLAPSIBLE METAL TUBES AND PLASTIC MOLDING**  
ALSO RIGID CANS AND IMPACT EXTRUSIONS BY AMERICAN EXTRUSION CORPORATION, DIVISION OF A. H. WIRZ, INC.

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435 S. La Cienega Blvd.

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Roberto Ortiz & Son

Export Div., 1010 Schaff Bldg  
Philadelphia 2, Pennsylvania

# Why plastic packages sell more co



*Recipe on the cover promotes sale of the product and six ingredient items!*

Another packaging idea, made possible by Monsanto's Lustrex styrene plastics, is paying off handsomely at point-of-sale!

This low-cost, transparent, fluted container for cottage cheese—with a recipe for cheese cake printed on the plastic lid—is demonstrating its appeal for both dealers and customers. Dealers like the way it is broadening the market for cottage cheese—and at the same time selling staples like gelatin, sugar, eggs, milk, lemons and graham crackers.

Shoppers are tripling their impulse purchasing of cottage cheese because the recipe gives them a new reason for buying.

The remarkable clarity, durability and printability of Lustrex styrene make it the perfect plastic for molding these containers. It is odorless, tasteless, nontoxic—and gives show-window display to the food inside.

The 14-oz. plastic container pictured, molded of Monsanto's Lustrex, is supplied in rainbow colors by the Massachusetts Plastic Corporation, Ludlow, Mass. Its cost compares favorably with conventional containers.

For further information, write Monsanto, who will put you in touch with specialists in packaging.



*Where creative chemistry works wonders for you*



# ore cottage cheese every day

*Colorful double-wall tumblers  
sample new customers  
and assure repeat sales!*

They're beauties . . . and they've proved a real profit-maker for dairies in every part of the country! That's because an attractive premium package "samples" new buyers.

"Tropicana Tumblers," a premium package molded of Monsanto's Lustrex styrene plastic, pave the way for getting new cottage cheese customers . . . and getting reorders week after week.

Lustrex styrene plastic gives these tumblers outstanding eye appeal. Their break resistance is remarkable. And the odorless, tasteless, nontoxic properties of Lustrex protect the purity of any food. A double wall, separated by an insulating vacuum, keeps iced drinks cool down to the last swallow.

"Tropicana Tumblers," available in 8 colors, are supplied in 10-oz. size on a guaranteed performance basis by the Mallory-Randall Corp., Brooklyn, N. Y. More than 90 dairies are already using them to send their sales of cottage cheese soaring to profitable new heights.

Monsanto will gladly put you in touch with plastic packaging specialists who will help you work out your own packaging requirements. Write Monsanto Chemical Co., Plastics Division, Room 647, Springfield 2, Massachusetts.

*It pays to package in*

## **LUSTREX\***

*styrene plastic*

*Monsanto also supplies  
polyethylene and cellulose  
acetate for packaging.*

\*LUSTREX: REG. U.S. PAT. OFF.



For All Packaging and Production Needs

# Specify **PAMARCO** ground finished **ROLLS**

-precision made by experts  
to the most exacting specifications

**EVENFLO**  
FLEXOGRAPHIC  
INKING  
ROLLS

**no-flex**  
FLEXOGRAPHIC  
PLATE  
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**PAMARCO**  
RUBBER  
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**PAMARCO**  
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ROLLS



All Pamarco rolls are manufactured to the highest precision standards. Continuous checking during manufacture, and a thorough final inspection upon completion guarantee absolute concentricity and adherence to the most detailed specifications.

Engraved surface meters ink automatically, makes time-consuming adjustments unnecessary. Save time, ink and rejects. Also recommended for applying all types of coatings by rotogravure.

Can't flex or whip, assure perfect impressions on every run. Tubular construction reduces weight, tests stronger than solid steel. Ground finish to exact specifications.

Accurate core or base cylinders for rotogravure process reproduction. Recommended for long service in continuous printing production. Each roll carefully inspected prior to shipment.

Cores by Pamarco for rubber covered rolls are supplied for every industrial application. All cores are machined from the finest grade shafting and ground finished by expert mechanics.

Precision ground plain steel rolls by Pamarco can be supplied for every industrial purpose. All sizes and shapes are made by Pamarco to exact specifications including finishing to desired tolerance.

PAMARCO ROLLS ARE AVAILABLE FOR EVERY  
PRODUCTION AND PROCESSING PURPOSE INCLUDING  
LIGHT DUTY ROLLS      ENGRAVED ROLLS  
TUBULAR ROLLS      HEAVY DUTY ROLLS  
CHILL ROLLS      WARM SURFACE ROLLS  
IDLER ROLLS      CHROME PLATED ROLLS  
RUBBER COVERED ROLLS

**PAPER MACHINERY & RESEARCH, INC.**

## Depend on the **ROLLS** **PRESS BUILDERS USE!**

Most modern presses are equipped at the factory with EVENFLO and No-Flex Rolls. Look for this sign of extra dependability on your new aniline presses. Your press builder will gladly supply data on Evenflo Rolls. Ask for the facts, today!

1014 OAK ST., ROSELLE, N.J.

new horizons in **KRAFT** packaging —



WITH TOUGH-TEMPERED  
**FROSTKRAFT**

FROSTKRAFT shipping containers and multiwall sacks are quality products made entirely from virgin fibers of the Southern Pine... the long, tough fibers preferred for maximum strength.

FROSTKRAFT quality typifies the Olin Mathieson Chemical Corporation's sixty years of leadership in cellulose chemistry, long experience in scientific packaging.

The know-how, experience and creative abilities of FROSTKRAFT engineers and designers are at your disposal. Our executives will be happy to help you reach the *right* solution—right away—to your kraft packaging problems.

**FROSTKRAFT**  
PAPER PRODUCTS



FOREST PRODUCTS DIVISION  
OLIN MATHIESON CHEMICAL CORPORATION  
WEST MONROE, LOUISIANA



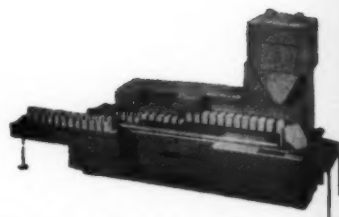


# Arenco Packages

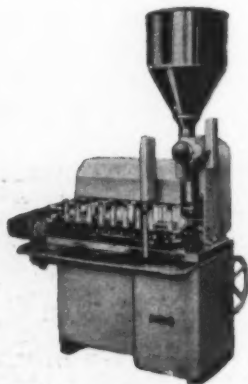
## America's Top Products!

• You'll find Arenco-packaged products among the best selling brands of cosmetics, pharmaceuticals, food products, tobacco items, and many other groups. In fact, almost every family in America buys one or more products packaged on Arenco machines.

Why is Arenco equipment so well accepted by manufacturers? That's easy to answer: because Arenco-filled packages are top performers, the kind that protect both the product and its reputation. Arenco machines produce close-tolerance fills, secure seals, easy-opening closures—all the so-called "outstanding features" of other lines are standard design on Arenco equipment. Look at these four fine machines, for example.

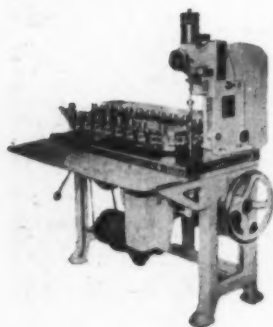
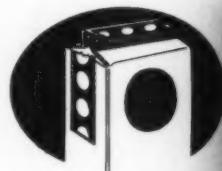


**Powdered-Materials Packaging Machine**—Fills from 1 to 5 pounds of flour, cereals, etc., in economical square-bottom, self-opening bags. Bags are handled by our exclusive automatic bag opening and feeding mechanism. Machine provides extremely accurate weights.



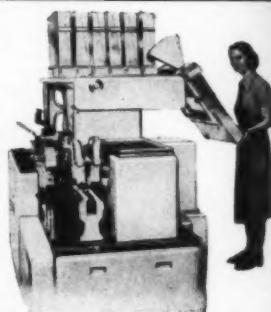
**Collapsible Tube, Jar, and Vial Filling Machine**—Used for packaging thick compounds, creams, liquids, and semi-liquids. It permits the quickest, easiest cleaning and changeover of any tube filling machine available, offers the "no tube, no fill" feature, and operates with exceptional quietness.

**Arenco Closure with sealed triple fold**—Neat, tight, practical. For dust-proof and tamper-proof seals. The closure that permits opening bag without tearing, and easy reclosing, a feature consumers like.



**Vial Filling Machine**—This machine handles the same types of products as the machine shown above, but fills only into vials & bottles. Cleaning and changeover can be done easily and quickly, and the "no tube, no fill" feature assures maximum cleanliness.

**Cigarette Packing Machine**—Handles a wide range of cigarette dimensions and package types with top-notch performance. Features modern central lubrication ("push one button, the machine is lubricated"). Our new, lightweight cigarette cassettes and automatic tray handling arrangement increases efficiency.



*Our extensive line include machines for many packaging purposes.*

*We'll be glad to send illustrated leaflets with complete data to you.*



**Representatives:**

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Tom McLay, P. O. Box 14, Port Deposit, Maryland  
Packaging Equipment, Inc., 2013 Olive St., St. Louis 3, Missouri  
J. W. Leser Co., 4408 W. Jefferson Blvd., Los Angeles 16, Calif.  
P. S. Equipment Co., 2281 Scranton Road, Cleveland 13, Ohio



● Two years ago, Martex was developing a package for their high fashion, highly colorful "Kitchen Originals" dish towels. They needed a crystal-clear package for maximum visibility and display value. But their distribution pattern called for five crucial operations which could wreak havoc with the package. In the plant... in the warehouse... in customers' warehouses... en route to the selling floor... on the selling floor... these sets would be subjected to rough handling. And a torn or burst package would mean shopworn merchandise... markdowns... clearances.

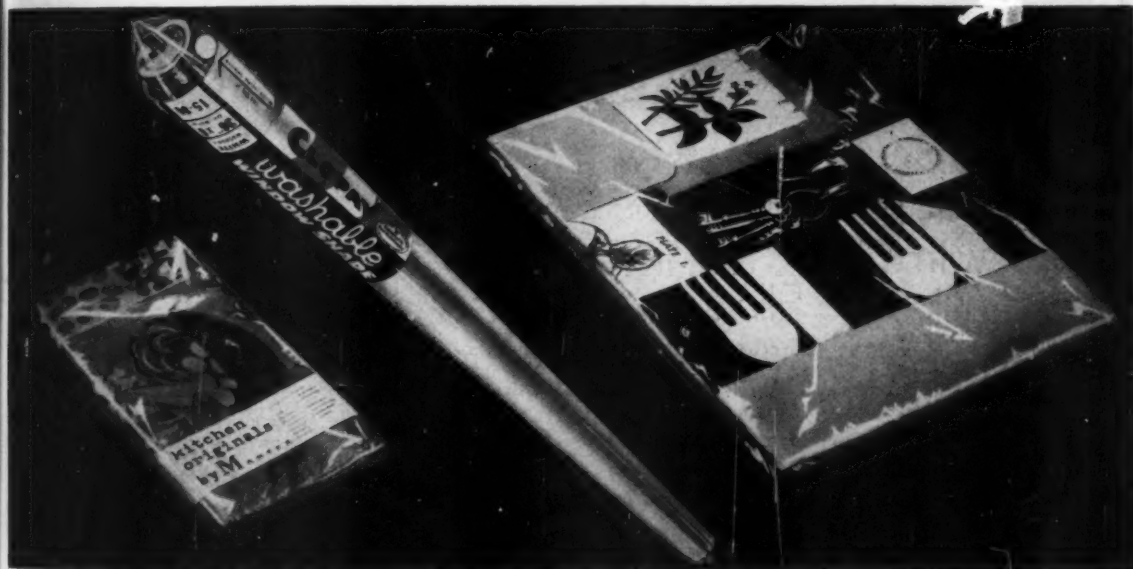
At this point, Martex turned to clopane. And clopane whipped the problem. For in this lowest cost, crystal-clear, lightweight, extruded vinyl film there is sparkling clarity... a soft, pleasant "hand"... complete imperviousness to water, moisture, air, or changes in atmospheric conditions... remarkable tear strength and toughness, for long shelf life.

That was two years ago. Today Mr. W. D. Hartman, Martex Vice-President in charge of sales, says: "clopane has proved to be extremely satisfactory. Its shelf life is excellent. It allows our kitchen sets to be seen at their best, and encourages impulse buying without allowing the merchandise to become soiled or shopworn."

clopane proved a profitable solution, also, for a critical packaging problem of Clopay's. For Clopay window shades, we created a long, narrow tube... sparkling clear for maximum visibility... heat sealable at both ends... workable without waste in high speed, continuous production. Now Clopay window shades have long shelf life!

You, too, may find clopane one of the most important vinyl films ever developed. clopane gives you freedom of choice. It is not restricted in width by machinery requirements... clopane is available up to 108 inch widths in sheets or rolls... interleaved if you wish. Also available in endless, seamless tubes from 2 inches to 54 inches in width.

"shopworn" is an obsolete term for Martex and Clopay!



things look better far longer in

# clopane<sup>®</sup> sparkling clear film

COPYRIGHT: BY CLOPAY CORPORATION, CINCINNATI, OHIO

clopane is the lowest cost, crystal-clear, lightweight, extruded vinyl film.  
For still lower cost packaging investigate Clopay's polyethylene films today!

For details, write, wire, or phone  
PLASTIC FILM DIVISION • CLOPAY CORPORATION  
CLOPAY SQUARE, CINCINNATI 14, OHIO

Clopay Corporation, Dept. 202, Plastic Film Division  
Clopay Square, Cincinnati 14, Ohio

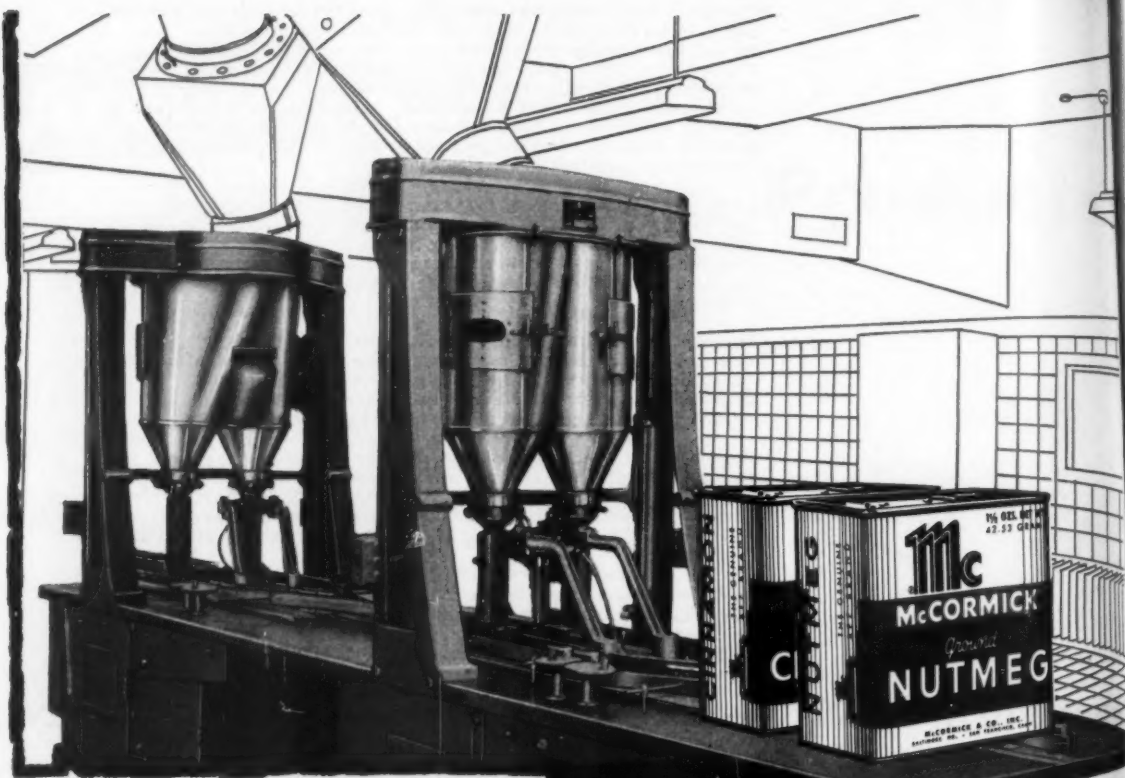
Gentlemen:

Please send me FREE copy of "clopane Facts".

Name.....Company.....

Address.....

City.....State.....



*Another*  
**famous brand name**  
 cuts packaging costs  
 with **STOKES & SMITH**  
 Automatic Fillers!

**At McCormick & Company, Inc.**

Stokes & Smith Model HG-86-87 Automatic Tandem 4-Station Fillers have increased average accuracy of fill to consistently close tolerances. From "fluffy" cinnamon to "oily" nutmeg, they fill 120 or more containers per minute in a range of volumes from 1/2 to 4 ounces.

Whether your product is a sticky powder, free-flowing granules or hard-to-manage flakes, the versatile Model HG-86-87 Automatic Filler will reduce your packaging costs by increasing accuracy of fill at high speed. It fills cans, jars or cartons by volume, gross weight or auger-vacuum in sizes ranging from 1 1/2" to 6" wide, 1 1/2" to 4" thick, and 1 1/2" to 8" high. It is ideally suited not only for spices and other foods but for drugs and cosmetics as well.

**5 Cost-Cutting Advantages**

**Average Accuracy**—plus or minus 1% for most products.

**Versatility**—handles a wide variety of products.

**Adjustability**—quick, easy changeover from one product or container size to another.

**Speed**—up to 145 containers per minute.

**Cleanliness**—auger, hopper, dust tube design assures dust-free fill.

For  
 further  
 details  
 and  
 specifications,  
 write to:

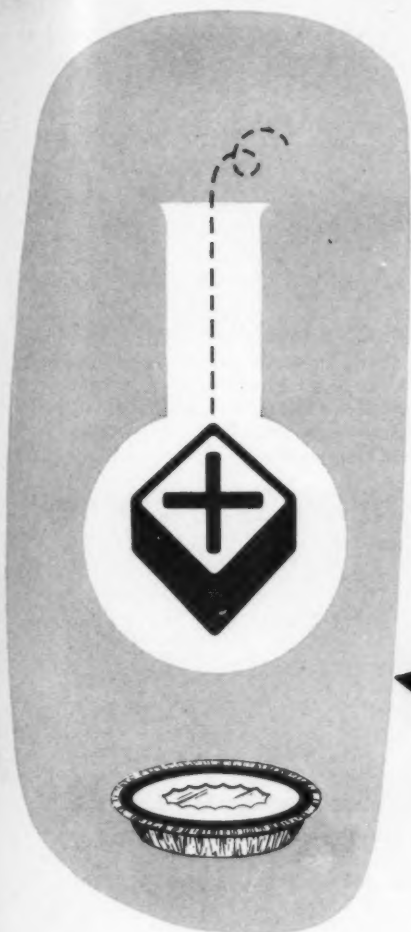


**STOKES & SMITH CO.**

4904-F SUMMERDALE AVENUE, PHILADELPHIA 24, PA.

Pacific Coast: SIMPLEX PACKAGING MACHINERY, INC., 534-23rd AVE., OAKLAND 6, CALIF.

SUBSIDIARY OF FOOD MACHINERY AND CHEMICAL CORPORATION



# RESEARCH

the plus of Ekco-Alcoa  
Containers



All the sciences relating to your product are brought to bear on your packaging problem at Ekco-Alcoa Containers Inc. Our Chemists, Food Technologists and Metallurgists working in test kitchens and laboratories, are backed by the facilities of the world's largest aluminum research laboratories. These research facilities and skills insure perfection in your container design.

*The Plus Container*



**EKCO-ALCOA CONTAINERS Inc.**

1900 North River Road • River Grove, Illinois

EKCO is the registered trademark of Ekco Products Company. ALCOA is the registered trademark of Aluminum Company of America. The corporate name and combination mark, EKCO-ALCOA, is used under license to the manufacturer by each of these companies.

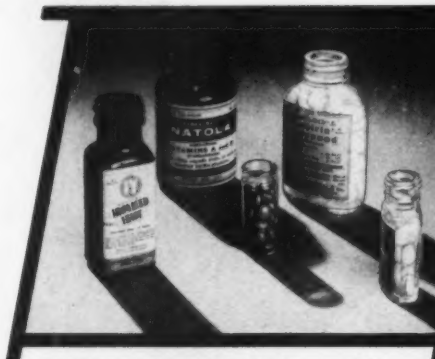
*They move faster...  
from maker to market...  
thanks to **US** boxmaking  
and packaging machines*

**US** boxmaking and packaging machines do their jobs accurately and efficiently — keep hundreds of today's finest products on the move, in long, steady progression. It's no wonder! They're designed and built to meet specific needs.

If your production is lagging because of packaging problems, call on **US** — our engineers and machines can help you.



**BRIGHTWOOD BOX MACHINES** Several models glue and form a broad variety of box styles in a wide range of sizes. Models available for standard single glued end and turned over end boxes. Change-overs are quick and economical.



**AUTOMATIC TABLET BOTTLING MACHINES** Automatic and semi-automatic models accurately count and fill bottles and other rigid containers. Machines can be equipped to handle a wide range of tablets, pills or capsules in any desired counts — and there's no tablet breakage.



**CANDY AND COUGH DROP CARTONING MACHINES** Many filling methods available — by count or by volume — depending on product. Fill an entire range of candy items without use of extra equipment, provided the same size carton is used.



**WEIGHING AND FILLING MACHINES** Automatic and semi-automatic models for weighing, volumetric filling or packing. For dry products, free flowing and non-free flowing materials such as coffee, rice, crackers, hard candy, chemicals, cocoa, talcum, food powders, etc.

**U. S. AUTOMATIC BOX MACHINERY CO., INC.**

Owning and Operating NATIONAL PACKAGING MACHINERY CO. • CARTONING MACHINERY CORP.

122 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York • Chicago • James C. Hale Co., Los Angeles, San Francisco • R. S. Gold, Toronto

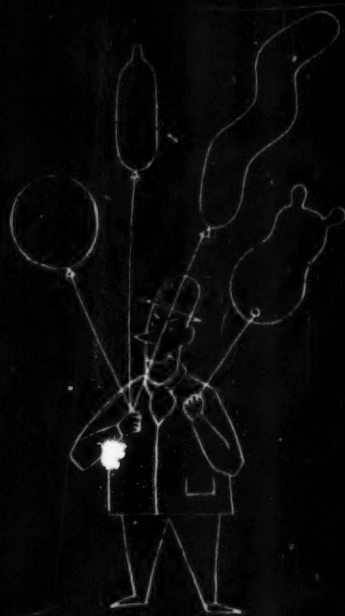




# fisher's foils

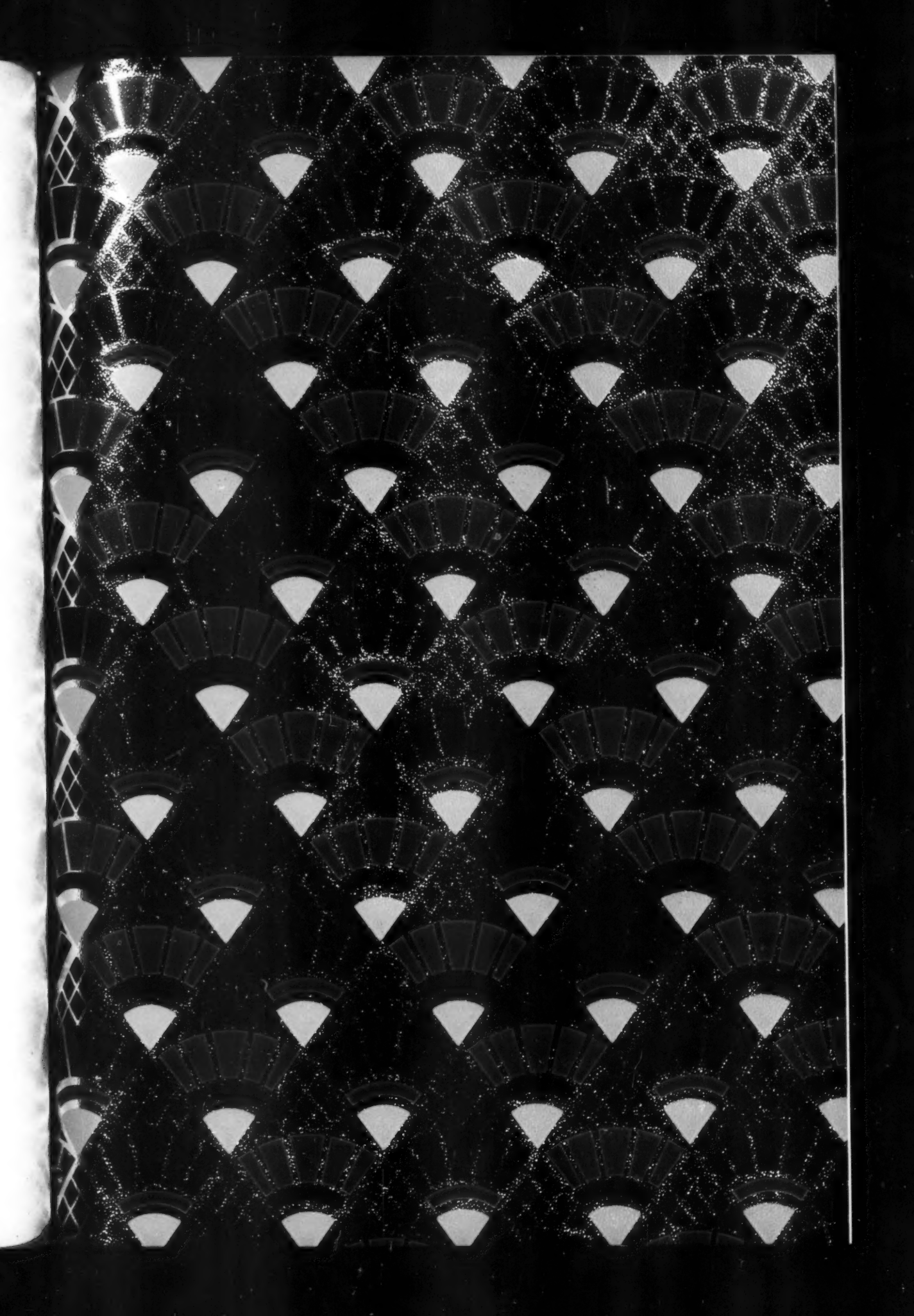


*keep sales soaring!*



FISHER'S FOILS LIMITED WEMBLEY MIDDLESEX ENGLAND  
TELEPHONE WEMBLEY 4011 CABLES & GRAMS LIDENIT WEMBLEY ARC CODE KTH EDN





★ *A Quality Product of FISHER'S FOILS of LONDON, ENGLAND.*

Throughout all stages of manufacture, every roll of foil made by Fisher's Foils of England is *automatically controlled* for gauge consistency by the latest beam gauge. Send today for wide range of samples or ask our representative to call.

**fisher's  
foils**





## Dream Packages Start with Someone Who is Wide Awake

Behind the package that refuses to be ignored—the one that attracts the shopper's hand like a magnet, is an individual or a team alert to new ideas, new opportunities.

The foundation for dozens of tomorrow's prize winning food containers is in the making at the new Crossett bleached board mill. On a huge new cylinder machine, soft and hard wood pulps are rigidly controlled to produce a board that will do the job you want done.

Want it tough—want it white—want it smooth—want it to multicolor print like a page in *Fortune*? You call the play—we'll find the way. That's the beauty of our highly flexible production equipment. We can make it sit up and do tricks.

May we talk with you about the many additional advantages of assuring yourself a consistent supply of board to your specifications from this independent mill?

**CROSSETT**  
A DIVISION OF



**PAPER MILLS**  
THE CROSSETT COMPANY

GENERAL SALES OFFICE • CROSSETT, ARKANSAS

BALTIMORE OFFICE  
J. W. Taylor  
414 St. Paul St.

DALLAS OFFICE  
H. E. Manner  
3409 Oak Lawn Ave.

CHICAGO OFFICE  
L. J. Walker, W. V. Williams  
D. W. Schrier  
200 West Washington

CINCINNATI OFFICE  
E. J. Lantry, J. T. Allen  
1816 First National Bank Bldg.

*"We are very  
pleased with  
this Package"*

VALVE KIT  
MANUFACTURER

As a merchandiser—the attractive styrene display case helps to bring in that unexpected sale.



# Servicemen like it

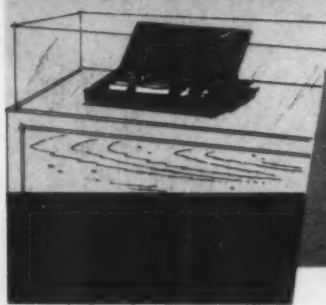
**...and it's a good merchandiser  
...helps to make that unexpected sale**

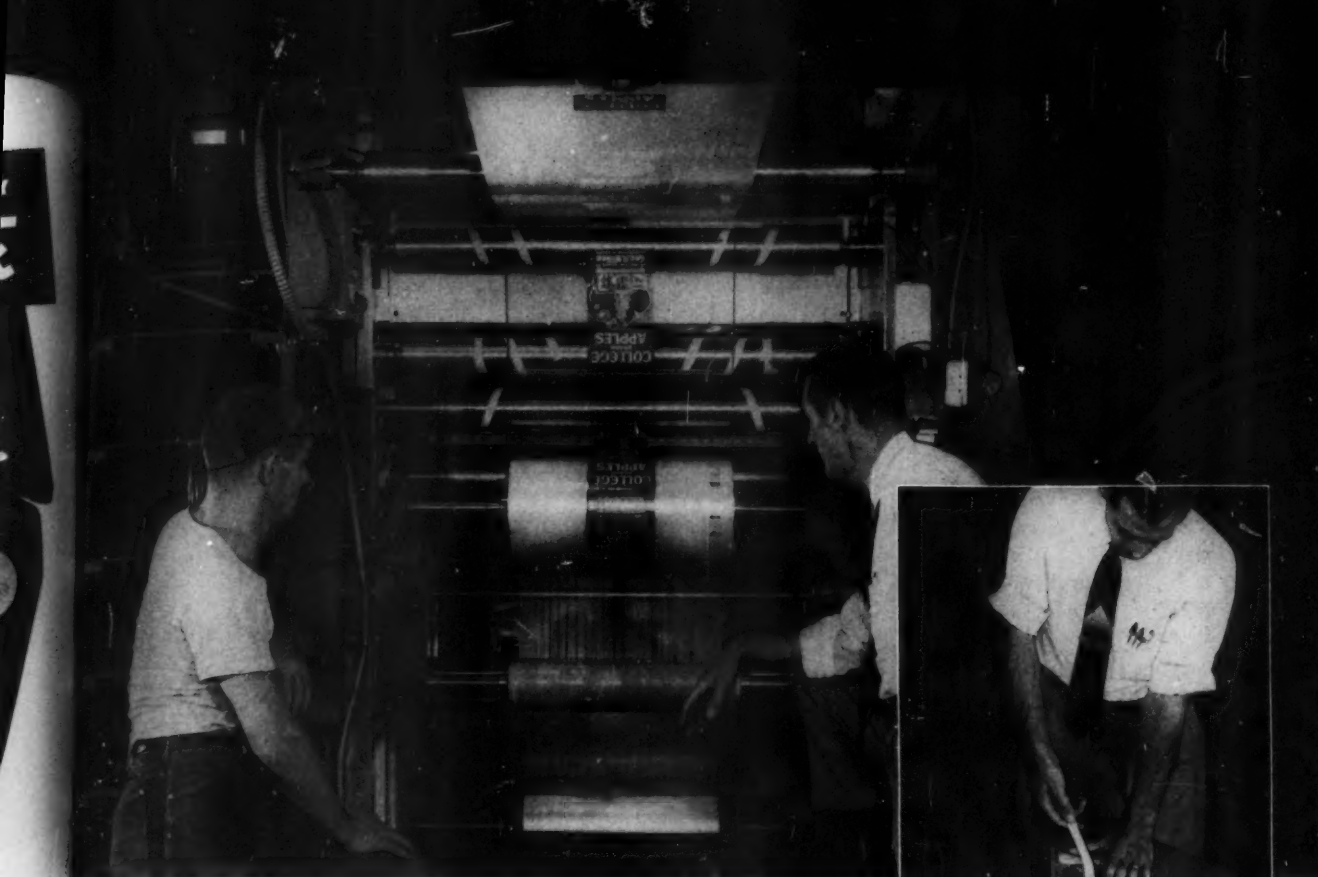
"We have met with an unusually favorable response from the trade," says the Dill Manufacturing Co., referring to its VALVE-PAK for tube and tubeless tire servicing. It performs a dual purpose—selling and servicing—and does both equally well.

This is typical of the job Vlchek transparent packages are doing not only in the case of small mechanical parts but also that of foods, cosmetics, drugs, hardware, soft goods, and many others.

We help users by suggesting the kind and size of package best suited to the need. If you have a packaging problem, let's talk it over.

Reduces loss—protects  
and keeps items clean  
and in place.





## New Flexographic Ink Has

Look at these other X-TRA good reasons for using BBD's new EXCELLOPAKE "400 X-TRA" INKS

**X-TRA SLIP QUALITY**...has anti-drag quality when dry; enables printed rolls to unwind more freely, run more smoothly on bag and wrapping machines.

**X-TRA BLOCK and HUMIDITY RESISTANCE**..."400 X-TRA" will not block, ink to ink or ink to face, at temperatures to 130°F.

**X-TRA LOW-TEMPERATURE RESISTANCE**...withstands the cold and moist conditions of dry and wet refrigeration.

**X-TRA HEAT RESISTANCE**...releases from heat-sealing elements at temperatures to 275°F., resists smudging, sticking, smearing.

**X-TRA MILEAGE**...the X-TRA solids content of white "400 X-TRA" makes it go further per pound. Tested against other whites, "400 X-TRA" has been proved to give more coverage per dollar.

**X-TRA VERSATILITY**...may be used—without special solvents—on any type of cellophane, treated polyethylene, aluminum foil, glassine and specialty papers.

## X-TRA Staying Power... X-TRA Hiding Power

BBD's new EXCELLOPAKE "400 X-TRA" Ink is making a sensational hit with flexographic printers of cellophane, polyethylene, foil, glassine and paper stocks. And there are a dozen good reasons why.

One good reason is the X-TRA strong adhesion of multi-purpose "400 X-TRA" Ink. At both extremes of temperature, as well as normal room temperature, "400 X-TRA" has outstanding *staying* power. Even when printed on the heavier, highly plasticized moisture-proof cellophanes and the anchor-coated films used for packaging meats, "400 X-TRA" does not rub, chip or flake off.

Another good reason is the X-TRA whiteness and opacity of White "400 X-TRA" Ink. It's a *whiter* white with more *hiding* power than other flexographic inks...affords a better foundation for other colors it underlays or backs up. That's why jobs printed with "400 X-TRA" Ink look X-TRA bright and X-TRA sparkling.

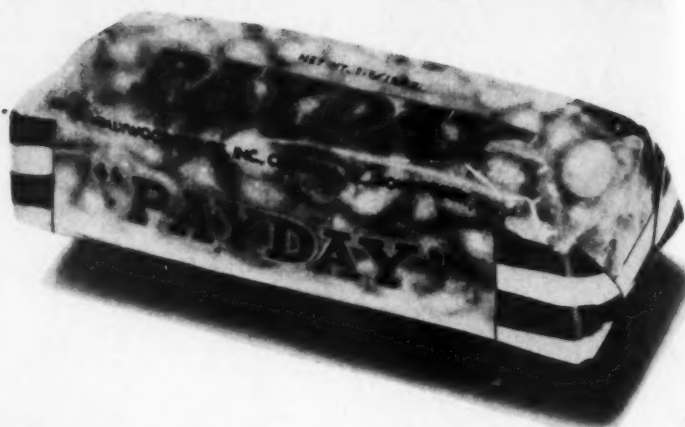
Use EXCELLOPAKE "400 X-TRA" Ink for X-TRA beauty of printing...X-TRA smooth performance on press...X-TRA assurance against block, bleed and offset problems. "400 X-TRA" is available in white and all colors, and we suggest you make a trial run of this X-TRA good ink real soon.

**Bensing Bros. and Deeney**  
Flexographic Ink Specialists  
PHILADELPHIA • CHICAGO • SAN LEANDRO, CAL.  
CAMBRIDGE, MASS. • MONROE, LA.

MANTON BROS. TORONTO, CANADA  
TRENAL CO. BRUSSELS, BELGIUM  
COLORA, LTD. BERNE, SWITZERLAND  
Export: McLAURIN-JONES CO., New York

Want more information about "400 X-TRA" Ink? Contact your nearest BBD office...or Bensing Bros. and Deeney, 3301 Hunting Park Avenue, Philadelphia 29, Pa.





IT'S **"PAYDAY"** ACROSS THE NATION...

...in a *Cellu-Craft* wrap!

Hollywood Brands, Inc., Centralia, Illinois, has full national distribution for its "PAYDAY" candy bar — offers premiums on the wrapper, promotes the candy on TV. To build impulse sales, Hollywood Brands knows that "PAYDAY" *must* be outstanding and *insists* on a perfectly printed wrapper that's consistently clean, neat and attractive. That's why Hollywood Brands, Inc. has

Cellu-Craft produce the printed cellophane wrap for "PAYDAY"—the package *always* meets specifications exactly and is *always* delivered on schedule.

Give *your* product a sales building package. Let Cellu-Craft design and produce one that "does the job" for *you*. Call for a Cellu-Craft Packaging Consultant today! No obligation, of course.

# CELLU-CRAFT

## PRODUCTS CORPORATION

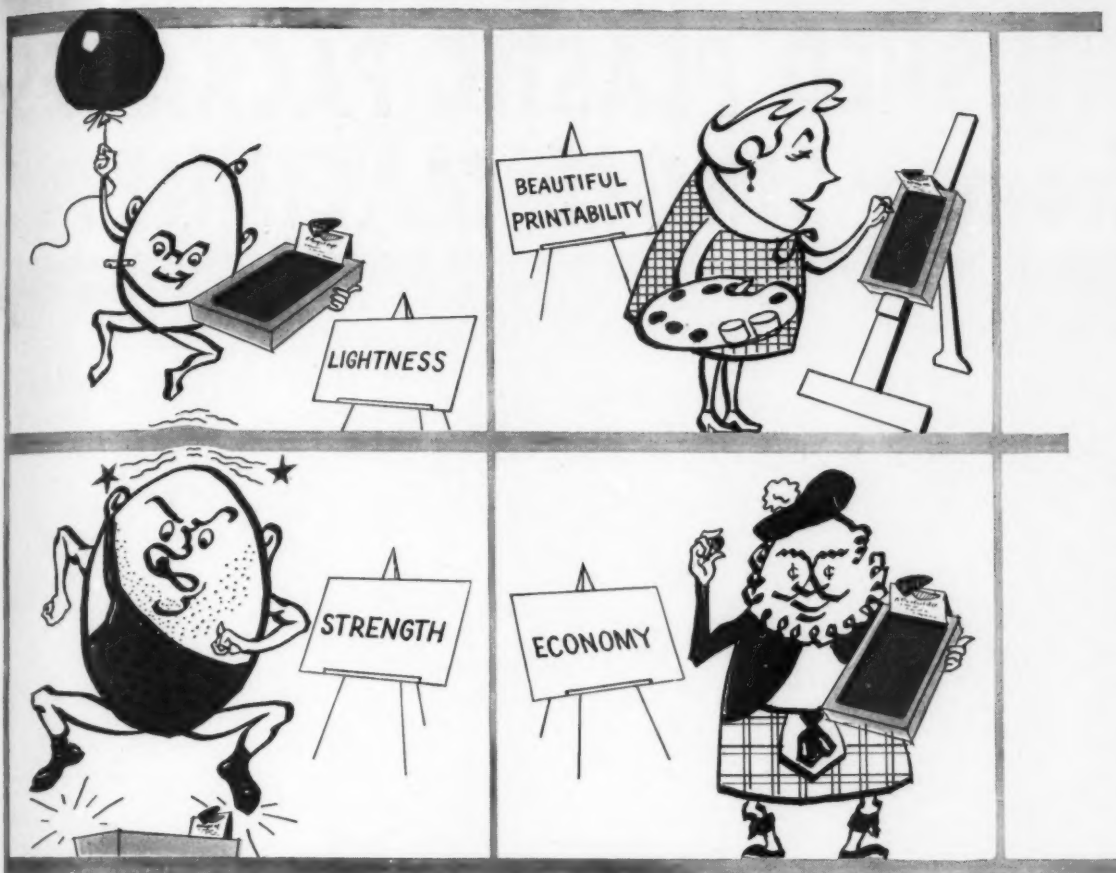
*Designers, Converters and Color Printers of Flexible Packaging Materials*

General Offices & Plant: 1401 4th AVE., NEW HYDE PARK, N. Y. • PRIMOSE 5-8000

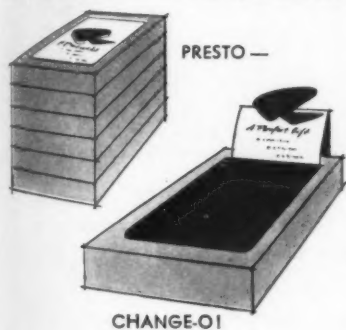
Branch Plant: ADDISON, ILLINOIS • Sales Offices in principal cities

PRINTED CELLOPHANE • POLYETHYLENE • PLIOFILM • FOIL • ACETATE • in ROLLS • BAGS • SHEETS • POUCHES • ENVELOPES





## Krafibre's team of features adds shelf + counter appeal to **RUGBY** boxes!



For the first time in 50 years, Rugby Knitting Mills, Inc. of Buffalo, New York can package its fine sportswear in boxes that not only protect in shipping and shelf storage, but also serve as highly attractive, eye-catching counter displays.

The dual purpose box, designed and produced by boxmaker Victor Wagner & Son, Inc. of Buffalo, was made possible only by Krafibre. This versatile new box-board offers unusual strength and tear resistance. It is much stronger than chipboard of equal thickness, yet costs less than any board of equal strength. Its lightness slashes shipping costs to the bone!

Krafibre, made in natural, white-lined and colors, is adaptable to special treatment and takes printing beautifully. It is a product of Columbia Box Board Mills, Inc., one of the largest independent board makers in the East, serving independent boxmakers since 1916.



**Columbia Box Board Mills, Inc., Chatham, N. Y.**

Please send me the Krafibre sample kit plus facts and figures.

NAME .....  
 TITLE .....  
 COMPANY .....  
 ADDRESS .....  
 CITY ..... STATE .....  
 MY BOXMAKER IS .....

Find out how Krafibre can cut boxmaking costs for YOU — and give you better boxes.

*Krafibre was developed by Columbia to permit better packaging more economically!*

# FINISHED PLASTIC PACKAGES from a SINGLE MACHINE...



## Lester AUTOMATIC Injection Molding Machines

Lester AUTOMATIC Injection Molding Machines are in fact miniature factories for producing finished plastic packages at a single station. They are self-contained units, equipped to run as individual machines, or in batteries attended by one operator.

Once the mold is installed, the proper temperatures established and the timers set for automatic repetition of the cycle—you can

*almost forget them!* A variety of automatic controls and safety devices are available to assure you low-cost, round-the-clock continuous production.

If you want assistance in planning your molded plastic packaging production—we'll be happy to work with you—from consultation on the mold to getting your installation running. Give us a call.



## LESTER INJECTION MOLDING MACHINES

### REPRESENTATIVES

New York . . . . . Steven F. Krould	Cincinnati . . . . . Index Machinery Corp.
Detroit . . . . . M. R. Tenenbaum	Los Angeles . . . . . Machinery Sales Co.
Chicago . . . . . J. J. Schmidt	St. Louis, Milwaukee . . . . . A. B. Geers
Cleveland . . . . . Don Williams	Providence . . . . . Sydney W. Lohman
Coral Gables . . . . . Morton Machinery Sales	

### FOREIGN

Toronto, Canada . . . . . A. R. Williams Mach. Co., Ltd.
Sydney, Australia . . . . . Scott & Holladay, Ltd.
Japan . . . . . Okura & Co., New York, Inc.
Stockholm, Sweden . . . . . Aktiebolaget Servus
Basle, Switzerland . . . . . Hermann Wälti

distributed by LESTER-PHOENIX, INC., 2712-W CHURCH AVENUE • CLEVELAND 13, OHIO

put your produce in the money.

with  
**POLY BAGS**  
by **MILPRINT**

One look at produce counters the country over . . . and you'll see that repackaged produce *looks* better and *sells* better—every time! That's why you'll sell more customers, more profitably when you switch to protective, eye-catching poly produce bags by Milprint!

There are many customer-appealing, money saving, stock bag designs available from Milprint—or Milprint's experienced artists and designers will create your own. For the widest variety of packaging materials and printing processes available anywhere, call your Milprint man—*first!*

**Milprint** INC  
PACKAGING MATERIALS  
LITHOGRAPHY & PRINTING

General Offices, Milwaukee, Wisconsin  
Sales Offices in Principal Cities

Printed Cellophane, Pliofilm, Polyethylene, Saran,  
Acetate, Glassine, Foils, Folding Cartons, Bags,  
Lithographed Displays, Printed Promotional Material.

*This ad printed by Milprint, Inc. \*Reg. U.S. Pat. Off.*



## Your wife and daughter know this name

They know that each newly-opened package of Bisquick will be factory-fresh—ready for instant use in the preparation of a wide range of wholesome, delicious baked goods. Modern packaging methods make possible the nation-wide delivery of this famous product—preserving those qualities of flavor and nutrition which have made Bisquick a household word.

We are proud of the fact that Arabol Adhesives are making their special contribution to this successful packaging and shipping operation. Out of 70 years of pioneering in the making of adhesives, it is our privilege to serve the leaders in a hundred industries—with adhesives for a thousand end uses.

Somewhere in your business you use adhesives. Somewhere near your place of business, one of Arabol's twelve plants and warehouses stands ready to serve you.

We invite the opportunity to submit samples for you to test in your own plant—under your particular working conditions—for your specific requirements, whatever their nature. That is the one kind of testing that assures you of satisfactory results. Your inquiry to Department 43 will bring a prompt response.

ADHESIVES ? ARABOL !

★  
ADHESIVES ? ARABOL !  
★

# 70

YEARS OF PIONEERING IN  
THE MAKING OF ADHESIVES



## ARABOL

ADHESIVES ? ARABOL !

THE ARABOL MFG. CO. . . . a nationwide organization serving major users of industrial adhesives  
EXECUTIVE OFFICES: 110 E. 42nd St., N. Y. 17, N. Y. • CHICAGO • SAN FRANCISCO • LOS ANGELES • ST. LOUIS  
ATLANTA • PHILADELPHIA • BOSTON • PORTLAND, Ore. • ITASCA, Tex. • CINCINNATI • DENVER • LONDON Eng.





*Finest*

**from every angle**

Round and square face powder boxes

Dusting powder boxes in three diameters

Talcum powder boxes

Guest soap and sachet set-up boxes



*Manufacturers of Fine Paper Boxes*



BOL!  
★ ADHESIVES & ARABOL!  
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G IN  
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ABOL!

al adhesives  
S • ST. LOUIS  
ONDON Eng.

CKAGING

FEBRUARY 1956

63

# Now...virtually unbreakable "windows" w



These packagers use window cartons of new Du Pont "Mylar" for sparkling-clear visibility: 1. Sewing Caddy—Coatee & Clark. 2. Musical Roll-A-Tune—Jolly Blinker, Inc. 3. Dozy Doe's Slippers—Little Ones Footwear, Inc. 4. Cake Decorations—Best Plastics, Inc. 5. Hot Cups—Lily-Tulip Cup Corp. 6. Thunderjet Squadron—Best Plastics, Inc. 7. Chocolate Covered Coconut Cream Egg—Falcon.

vs" with new Du Pont

# MYLAR

REG. U. S. PAT. OFF.

## STRONGEST PLASTIC FILM IS THE ANSWER TO A VARIETY OF TOUGH PACKAGING PROBLEMS

Window cartons of new Du Pont "Mylar"\* polyester film now offer lasting transparent protection to a wide variety of products. The high tear strength, impact strength and dimensional stability of "Mylar" make possible larger windows, or windows where none were possible before—let hard-to-package items keep their sparkling sales appeal indefinitely.

Only windows of Du Pont "Mylar" offer all these advantages:

- Vivid clarity
- High tensile, tear and impact strength
- Long life—no plasticizer to dry out
- Stability—retains its dimensions —80° to 300°F.
- Won't shrink or warp cartons

If you are interested in "Mylar" for window boxes or other packaging applications, mail the coupon below:

\*"Mylar" is Du Pont's registered trademark for its polyester film

## DU PONT PACKAGING FILMS

CELLOPHANE • ACETATE FILM  
"MYLAR" POLYESTER FILM



REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING ... THROUGH CHEMISTRY

E. I. du Pont de Nemours & Co. (Inc.)  
Film Dept., N 10414  
Wilmington 98, Delaware

- ☐ Send me information on "Mylar" Polyester Film for window boxes.
- ☐ Send me information on other packaging uses for "Mylar."

Name

Firm

Address

City  State

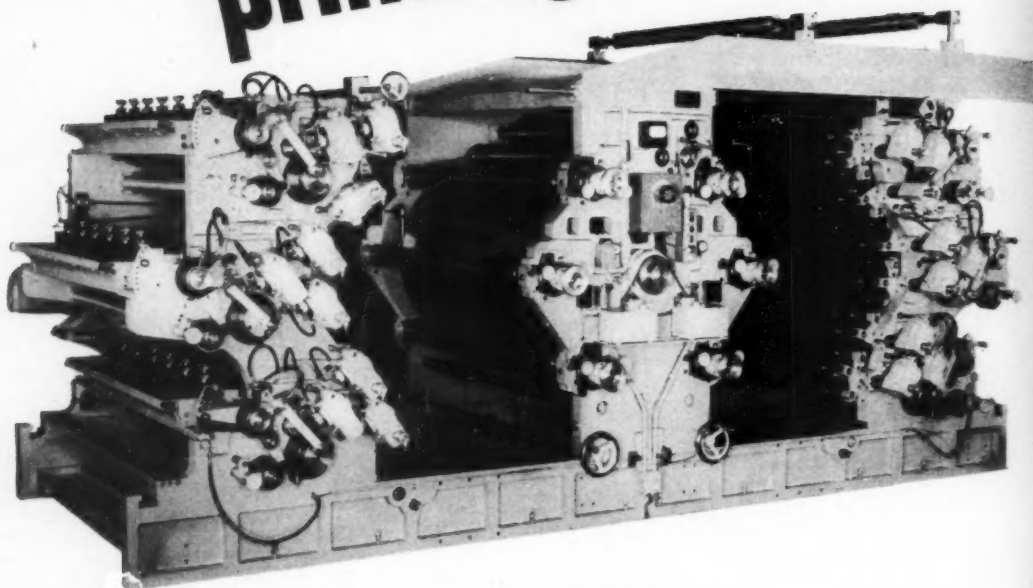


1. Dory Doe's Slippers—Little Ones Footwear, Inc. 4. "Playsip" Nursing Set—Leda Toy Co.  
3. Easter Egg—Falcon Nut and Candy Co. 10. Food Cups—Lily-Tulip Cup Corp.

FEBRUARY 1956

65

# you'll cut process printing costs



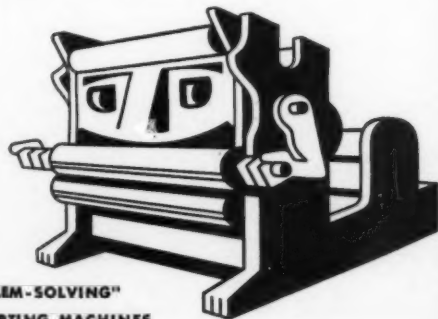
## with Paper Converting's NEW 6-color rubber plate letterpress

You can beat the squeeze of rising process printing costs and tougher customer budgets by using Paper Converting's *NEW 6-color rubber plate letterpress*. Producing top quality printing at amazingly low costs, this equipment makes metal plate letterpress obsolete for most packaging printing jobs. You'll handle screens up to 120 line with perfect register and dot formation—reproduce solids and fine type sharply. Yet production costs plunge . . . thanks to economical "plant-made" plates that provide 3 to 5 million impressions, up to 20% reduced ink consumption, and as much as 15% less trim waste of paper tonnage.

Enjoy the advantages of perfect color control, shortened delivery schedules, and highly flexible repeat lengths that *only* rubber plate letterpress equipment offers. Reduce downtime, too, by using

the special mounting and proofing unit that lets skilled pressmen concentrate on plate make-ready and proofing, permits less-skilled workers to control actual press runs. You'll minimize press make-ready time—improve service and increase profits.

Sales manager or plant superintendent, you need to know all about this 6-color rubber plate letterpress that is *revolutionizing* process printing. A card or a collect call will promptly bring you complete information on Paper Converting's newest "problem-solving" machine.



"PROBLEM-SOLVING"  
CONVERTING MACHINES



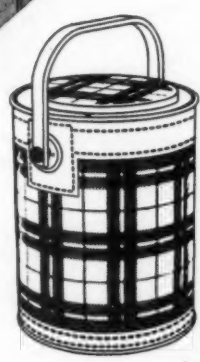
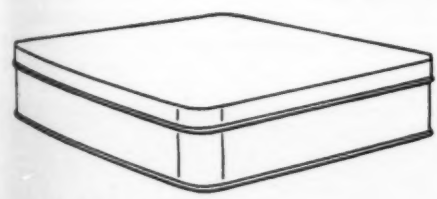


# HEEKIN

## Product Planned Cans for Every Need



LET Heekin's engineers and market research personnel give you the benefit of their fifty-five years of metal packaging experience. Heekin Cans are Product Planned lithographed or plain . . . planned for your profit.



# HEEKIN CANS



since 1901

THE HEEKIN CAN CO. PLANTS IN OHIO, TENNESSEE & ARKANSAS—SALES OFFICES: CINCINNATI, OHIO; SPRINGDALE, ARKANSAS

# Not even a rhinoceros



We will be glad to send names of converters of  
VISQUEEN film serving your territory. Just clip coupon,  
attach to your letterhead, and mail.

**VisQueen**

film . . . a product of  
**THE VISKING CORPORATION**

Plastics Division, P. O. Box H2-1410, Terre Haute, Indiana  
In Canada: VISKING Limited • Lindsay, Ontario  
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Name \_\_\_\_\_  
Title \_\_\_\_\_  
Products \_\_\_\_\_

is better equipped than VISQUEEN film to withstand rough handling. Here is the packaging film that was created to take the jolts and jars of shipment, bumps of stockroom handling and to absorb the punishment that is so much a part of the self-service picture. VISQUEEN won't split, crack, shatter, run; won't curl, break or dry out under display lights. VISQUEEN remains soft and pliable at 70 degrees below zero. Another reason why more VISQUEEN is sold than any other polyethylene film.

## VISQUEEN® "C"

is unmatched for ink adhesion. The ink stays on—it won't rub off.

## VISQUEEN

is tougher, has better tear resistance, greater tensile strength, higher resistance to puncture.

## VISQUEEN

has body, flexibility and uniformity—you can make, fill and close bags faster.

## VISQUEEN

cuts packaging costs as much as 50%—improves packaging.

**Important!** VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. Only VISQUEEN has the benefit of research and resources of The VISKING Corporation.

NEW! FASTER AUTOMATIC HEATING

MEANS

**Lower Costs!**

NEW! SMOOTHER ACTION MEANS

**Improved Quality!**

The New Series "H"

**FORMVAC**

Vacuum Forming Equipment

Takes a **BIG LEADERSHIP STEP FORWARD** with

**American Manufacture**

and **AMERICAN DESIGN IMPROVEMENTS**

IT HAD TO HAPPEN because the combination of Formvac and Welding Engineers, Inc. means only two things—improved American designing and greater American production flexibility. Every advantage of the 1955 Formvac automatic equipment is built into the new 1956 series "H" line. Now, thanks to the unrivalled experience of the laboratory and engineering staffs which have worked hand in hand with Formvac, specifications for this NEW improved equipment bring outstanding opportunities to the deep draw and drape vacuum forming industry: Faster, smoother heating cycles to increase production 20% and more! Approved American instrumentation • New flexible custom designing to coordinate before and after handling operations • Increased automatic sensitivity to permit quality processing of more difficult thermoplastics and forming of more demanding intricate shapes from multiple minute unit molds and jumbo molds.

**FORMVAC**

**FORMVAC THE ONE COMPLETE  
VACUUM FORMING PRODUCTION SYSTEM**

• Fast Automatic Equipment •  
• Plastic Extrusion Dies • Plastic  
• OF Equipment • Plastic Sheet  
• Equipment • Plastic Sheet  
• Equipment • Vacuum Drape and  
• Equipment for Plastic  
• Plastic Sheet Tensioning Equipment

For further information, demonstration appointments, sales or engineering service  
contact Formvac, Inc. and Canada, write FORMVAC CORPORATION (a division of  
Welding Engineers, Inc.), 401 West 23rd Street, New York 1, N. Y. Telephone WA 4-2024  
• 2024, Cable address Formvac, N. Y. West Coast Representatives (California,  
Arizona, Nevada) - WELCHER SALES CO., 2330 Lucie Boulevard, Los Angeles  
24, California, Telephone (213) 341-1111

*Important news for policy-making executives—*

## A Market Research Organization that Specializes in Plastics and Packaging!

Modern Plastics Research Corporation was founded to help you chart profitable new areas of operations in the fast-growing markets of plastics and packaging.

### BACKGROUND FACTS

More and more companies are investigating these fields with an eye to developing materials, products, markets, and new openings for capital investment.

Nevertheless, the prudent executive charged with shaping policy knows that the plastics and packaging fields are complex. To steer a knowledgeable course calls for highly specialized research by experts who *know* the field, its problems and its personnel.

### WHAT THE COMPANY IS

Modern Plastics Research Corporation is staffed by specialists in all phases of plastics and packaging: present and potential applications, developments in materials and technology, marketing and distribution.

Moreover—and most significantly—the firm is directly affiliated with Modern

*Plastics and Modern Packaging magazines, the largest and most authoritative publications serving these markets. It has full access to the accumulated experience and knowledge of these publications and their staffs.*

### HOW TO USE ITS SERVICES

If you are looking for a fresh approach to your own program of expansion—or if you feel the need for thoroughly researched facts concerning your current operations—then you should arrange *now* for a preliminary consultation with a principal of this organization.

Such a meeting places you under no obligation—yet enables you to estimate *in advance* the value that a full analysis can bring to your company.

*All communications and inquiries held in strictest confidence.*

### MODERN PLASTICS RESEARCH CORPORATION

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New York 22, N. Y.

Plaza 9-2710



OXFORD



Uniflex C1S L

OXFORD PAPER COMPANY  
RUMFORD, MAINE • WEST CARROLLTON, OHIO

OXFORD PAPER COMPA  
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OXFORD



Uniflex C1S Litho

OXFORD PAPER COMPANY  
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Uniflex C1S Lit

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OXFORD



Uniflex C1S Litho

OXFORD PAPER COMPANY  
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FOR OUTSTANDING  
LABELS, WRAPS AND  
DISPLAYS...

OXFORD

UNIFLEX

COATED ONE SIDE,  
LITHO

OXFORD PAPER COMPANY  
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**This insert is a sample of  
the outstanding results  
you can get on**

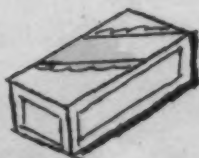
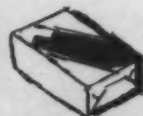
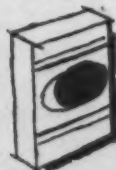
# OXFORD



## Uniflex C1S Litho

**OXFORD PAPER COMPANY**

RUMFORD, MAINE • WEST CARROLLTON, OHIO



**UNIFLEX** is Oxford's new coated-one-side paper, perfected after three years of research. In the moderate price range, it offers reproduction qualities comparable to higher priced enamels. Uniflex ranks high in brightness, appearance and dimensional stability. A new, exclusive coating formula gives Uniflex a level, polished surface with high pick-resistance for outstanding offset and letterpress results in monotone and full color. It takes varnish, gloss inks and embossing to perfection.

Uniflex was developed especially for the packaging field, for bottle, can and box labels, box liners, cigarette cups, display mountings, package wraps, soap wrappers, window strips and other similar uses.

Other Fine Oxford Papers available to the Packaging Industry

BOX LINER  
BOX LINER, SATIN PLATE  
BOX LINER, GLOSS PLATE  
BOX WRAP  
COATING BODY STOCK  
ENGLISH FINISH LITHO  
GIFT WRAPPING  
GUMMING, ENGLISH FINISH & SUPER  
LAMINATING PAPER  
SOAP WRAP  
SUPER LITHO  
WAXING BASE STOCK

If your specifications call for other specialized or unusual papers consult your Oxford Merchant who will arrange for an analysis of your requirements and for practical recommendations by our Research and Manufacturing Departments.

### Nation-wide Service Through Oxford Merchants

Albany, N. Y. . . . .	W. H. Smith Paper Corp.
Asheville, N. C. . . . .	Henley Paper Co.
Atlanta, Ga. . . . .	Wyant & Sons Paper Co.
Augusta, Maine . . . . .	Carter, Rice & Co. Corp.
Baltimore, Md. . . . .	The Mudge Paper Co.
Bethlehem, Pa. . . . .	Wilcox-Walter-Furlong Paper Co.
Boise, Idaho . . . . .	Blake, Moffitt & Towne
Boston, Mass. . . . .	Carter, Rice & Co. Corp.
	Storrs & Bement Co.
Buffalo, N. Y. . . . .	Franklin-Cowan Paper Co.
Charlotte, N. C. . . . .	Caskie Paper Co., Inc.
	Henley Paper Co.
Chicago, Ill. . . . .	Birmingham & Prosser Co.
	Bradner, Smith & Co.
	Marquette Paper Corporation
	Midland Paper Company
Cincinnati, Ohio . . . . .	The Whitaker Paper Co.
	The Johnston Paper Co.
	The Whitaker Paper Co.
Cleveland, Ohio . . . . .	The Cleveland Paper Co.
Dallas, Texas . . . . .	Graham Paper Co.
Dayton, Ohio . . . . .	The Whitaker Paper Co.
Des Moines, Iowa . . . . .	Birmingham & Prosser Co.
Detroit, Mich. . . . .	Chope Stevens Paper Co.
Fresno, Calif. . . . .	Blake, Moffitt & Towne
Gastonia, N. C. . . . .	Henley Paper Co.
Hartford, Conn. . . . .	Green & Low Paper Co., Inc.
	Storrs & Bement Co.
High Point, N. C. . . . .	Henley Paper Co.
Indianapolis, Ind. . . . .	MacCollum Paper Co.
Kalamazoo, Mich. . . . .	Birmingham & Prosser Co.
Kansas City, Mo. . . . .	Birmingham & Prosser Co.
	Graham Paper Co.
Knoxville, Tenn. . . . .	Louisville Paper Co.
Little Rock, Ark. . . . .	Roach Paper Co.
Long Beach, Calif. . . . .	Blake, Moffitt & Towne
Los Angeles, Calif. . . . .	Blake, Moffitt & Towne
Louisville, Ky. . . . .	Graham Paper Co.
Lynchburg, Va. . . . .	Louisville Paper Co.
Manchester, N. H. . . . .	Caskie Paper Co., Inc.
Memphis, Tenn. . . . .	C. H. Robinson Co.
Milwaukee, Wis. . . . .	Louisville Paper Co.
	Allman-Christiansen Paper Co.
	Sensenbrenner Paper Co.
Minneapolis, Minn. . . . .	Wilcox-Mosher-Leffholm Co.
Nashville, Tenn. . . . .	Graham Paper Co.
Newark, N. J. . . . .	Bulkley, Duntion & Co., Inc.
New Haven, Conn. . . . .	Bulkley, Duntion & Co.
	(Division of Carter, Rice & Co. Corp.)
	Storrs & Bement Co.
New Orleans, La. . . . .	Graham Paper Co.
New York, N. Y. . . . .	Baldwin Paper Co., Inc.
	Bulkley, Duntion & Co., Inc.
	Green & Low Paper Co., Inc.
	Kennelly Paper Co., Inc.
	The Whitaker Paper Co.
Oakland, Calif. . . . .	Blake, Moffitt & Towne
Omaha, Neb. . . . .	Western Paper Co.
Philadelphia, Pa. . . . .	Atlantic Paper Co.
	Wilcox-Walter-Furlong Paper Co.
Phoenix, Ariz. . . . .	Blake, Moffitt & Towne
Pittsburgh, Pa. . . . .	General Paper Corp.
	Brubaker Paper Co.
Portland, Maine . . . . .	C. H. Robinson Co.
Portland, Oregon . . . . .	Blake, Moffitt & Towne
Providence, R. I. . . . .	Carter, Rice & Co. Corp.
Reno, Nevada . . . . .	Blake, Moffitt & Towne
Richmond, Va. . . . .	Cauthorne Paper Co.
Rochester, N. Y. . . . .	Genesee Valley Paper Co.
Sacramento, Calif. . . . .	Blake, Moffitt & Towne
St. Louis, Mo. . . . .	Birmingham & Prosser Co.
	Graham Paper Co.
	Shaughnessy-Knisp-Hawe Paper Co.
	Tobey Fine Papers, Inc.
San Bernardino, Calif. . . . .	Blake, Moffitt & Towne
San Diego, Calif. . . . .	Blake, Moffitt & Towne
San Francisco, Calif. . . . .	Blake, Moffitt & Towne
San Jose, Calif. . . . .	Blake, Moffitt & Towne
Seattle, Wash. . . . .	Blake, Moffitt & Towne
South Bend, Ind. . . . .	Birmingham & Prosser Co.
Spokane, Wash. . . . .	Blake, Moffitt & Towne
Springfield, Mass. . . . .	Bulkley, Duntion & Co.
	(Division of Carter, Rice & Co. Corp.)
	Mill Brand Papers
Stockton, Calif. . . . .	Paper House of New England
Tacoma, Wash. . . . .	Blake, Moffitt & Towne
Toledo, Ohio . . . . .	Blake, Moffitt & Towne
Tucson, Ariz. . . . .	Paper Merchants, Inc.
Tucon, Ariz. . . . .	Blake, Moffitt & Towne
Washington, D. C. . . . .	John Floyd Paper Company
Worcester, Mass. . . . .	Esty Div. Carter, Rice & Co. Corp.
York, Pa. . . . .	The Mudge Paper Co.

OXFORD PAPER COMPANY, 230 Park Avenue, New York 17, N. Y. ★ OXFORD MIAMI PAPER COMPANY, 35 East Wacker Drive, Chicago 1, Ill.

Mills at Rumford, Maine, and West Carrollton, Ohio

Does Price Competition Keep You from Packaging with Polyethylene?  
— Or Have the Complications of Bagmaking Restrained You?

**NOW! -At Last..**

# POLYETHYLENE PACKAGING FOR EVERYONE!

THROUGH

*"Poly-ette"*



BECAUSE OF ITS

THE MACHINE THAT HOLDS THE KEY TO GREATER  
SALES VOLUME THROUGH POLYETHYLENE PACKAGING!

## UTTER SIMPLICITY OF OPERATION

Fool-proof! Fumble-proof! — No skilled help is required. Anyone — and we do mean anyone — can operate the "Poly-ette". This rugged little machine has all the precision qualities normally expected of large capital equipment yet is so completely simple to operate that anyone in the plant can take a few minutes to run off a handsome batch of bags, — bags made of plain or printed, flat and gusseted tubing, with smooth and uniform seals that meet highest quality requirements.

## AND LOW COST!

The price has been scaled to the simplicity of the machine and in anticipation of mass sales.

**SIZE RANGE:** Handles bags from 0" to 14" in width and to 27" in length.

**SPEEDS:** Approximately 60 per minute on average size bags. Rates on gusseted bags run slightly lower.

*"Poly-ette"*  
DIVISION  
**CONAPAC CORPORATION**  
120 EAST 13th STREET,  
NEW YORK 3, N. Y.

**BE THE FIRST  
IN YOUR FIELD  
TO TAKE  
ADVANTAGE  
OF "Poly-ette"**

**MAIL THIS  
COUPON  
TODAY!**

Poly-ette Div.  
Conapac Corporation  
120 E. 13th Street, N. Y. 3

Gentlemen:

Please forward complete specifications on Poly-ette ☐

Please arrange an appointment for a personal demonstration on "Poly-ette" the week of \_\_\_\_\_

NAME, TITLE & FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_



THE

**INTA-ROTO**

*Machine Company Inc.*

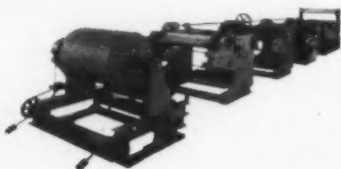
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GM-1000

Super laminating, coating  
and thermoplastic machines.



In-Line Flexographic Press



WB 500

Wax bleed laminator with  
foil treating station.



Slitters & Rewinders—  
Kimble & Kampf Types.



Complete base cylinder &  
engraving service.

## We Are Again Building ROTOGRAVURE PRESSES For Any Web Width

A good many of our business friends are familiar with the fact that in 1950 we entered into an agreement with the Kidder Press Company whereby we sold it certain of our assets, including the design for the Rotogravure Printing Presses we had previously manufactured, to help it enter that field. In so doing, we agreed not to compete for five years. (And we take a great deal of pride in complimenting the Kidder Press Company on the wonderful work they have done.) Now, having fulfilled this agreement, we are free to build any type and size of rotogravure press.

Basic designs for our new presses are complete. The plans, specifications, layouts and accessories are all new. We can make delivery of these machines, incorporating advanced features never before available in rotogravure presses, in eight to ten months.

We have already established ourselves as one of the leading manufacturers of laminating, coating and coloring machines, flexographic presses, slitters and rewinders and we will continue in this field.

Inta-Roto Engraving Corporation, in a modern plant on the same site, renders complete gravure service. Cylinders made in the machine plant can be copper or chrome plated, engraved and proofed — all at one location, on one order, with integrated supervision and responsibility throughout.

With greatly enlarged plant facilities just completed, Inta-Roto moves ahead!

*Albert H. Meyer*  
President





- 1** A polyethylene bag displays this 23 piece "do-it-yourself" kit of copper enameling blanks produced by The Craftint Mfg. Co., Cleveland. Package is designed for counter racks. Bag by Munson Bag Co., Cleveland.



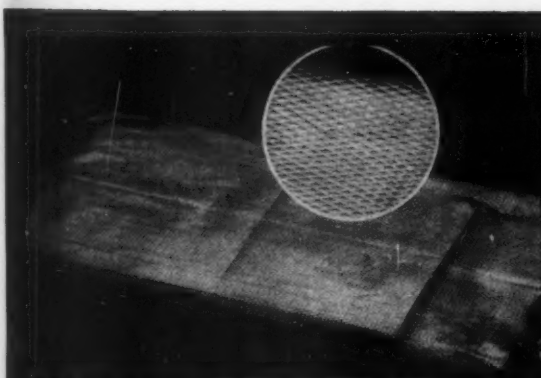
- 2** "Buy me," says this attractive polyethylene package. Bag not only keeps "Drop Lite" factory fresh, but displays contents and points out product features. Bag produced by Dura-Lee Corporation, Kansas City, Mo.

## WHAT'S NEW IN polyethylene packaging

Selected outstanding examples of the newest in polyethylene packaging. (These packages weren't necessarily made of Poly-Eth Polyethylene, but they're too good to miss.)

Wherever you look these days—at packaging shows, at super markets, in department stores—the packaging material everyone is talking about is the strong, lightweight, flexible plastic, Polyethylene. A few of today's most exciting new Polyethylene packages are shown on this page. You, too, can get on the Polyethylene bandwagon! We'll be glad to direct you to processors who produce Polyethylene packages. Just write, "Poly-Eth," Spencer Chemical Co., Dwight Bldg., Kansas City, Mo.

**Poly-Eth by SPENCER**



- 3** Countless uses are seen for this new embossed polyethylene bag. Eye-catching embossed design makes for extra consumer appeal. Available in natural and in colors. Made by Plicose Mfg. Corp., Brooklyn.



- 4** Special adaptation of process printing inks produces lively color contrast on this polyethylene package for dressed pheasant. Designed and produced by Arkell and Smiths, Canajoharie, N. Y.



## HAVE YOU AN ASSET LIKE THIS?

Grandmothers show their daughters—and their granddaughters—the famous trademark shown on the opposite page. After decades of use that familiar symbol still wields such selling power that it is spotlighted on every package.

What is there about your reputation and your product that can play such a dramatic

role in your sales success? Helping you isolate that element, and making the most effective use of it, is a job for Gardner packaging specialists. And has been for over half a century.

Why not make the inquiry that may vitally concern your sales future? There's a skilled Gardner representative in your area.



*Many of America's greatest products go to market in "Cartons by Gardner"*

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (*Cincinnati*), Ohio  
SALES OFFICES in Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis, Greensboro, N. C.

# THE GARDNER BOARD AND CARTON CO.



*Manufacturers of Folding Cartons and Boxboards*



IN THE LAUNDRY

Sol Soda Concentrated makes hard water soft and gentle. In tubs or automatic washing machines use 3 tablespoonsful to each 5 gallons of water for cleaning dirty clothes safely and work clothes thoroughly. For heavily soiled clothes use stronger solution. Less soap is required. Excellent for cleaning tubs and washing machines after use.

\*\*\*  
CLEANS BROILERS OVENS

STOVE BURNERS: To clean, remove and immerse in a solution of 2 tablespoonsful of Washing Soda to a gallon of hot water. If very dirty, boil in this solution for a few minutes. Scrub with a stiff brush, rinse and dry.

ONE POUND NET WEIGHT

**NEW DOUBLE  
THE CLEANING POWER!**

**ARM & HAMMER  
SAL SODA  
CONCENTRATED**

**WASHING SODA  
WATER SOFTENER AND CLEANER  
CUTS GREASE AND DIRT**

FROM THE GARDNER GALLERY OF FAMOUS AMERICAN PACKAGES





## *Designed to Sell*

A consumer panel chose this Nashua package design over eleven others. What gives this overwrap for O'Donnell-Usen its shopper-appeal? Accurate reproduction of the product at its appetizing best, and bold use of color for easy product identification.

To reproduce original package colors and maintain them over long press runs requires expert color matching. To this phase of packaging (left), Nashua crafts-

men bring an infinite amount of skill, patience and experience, insuring the accuracy of precision equipment.

For today's self-service merchandising you need the full "Power of the Package." Call in a Nashua representative and see this presentation. Nashua Corporation, Franklin St., Nashua, New Hampshire. Sales offices in New York, Philadelphia, Chicago, San Francisco, and Peterborough, Ontario.

40 YEARS OF CREATIVE PACKAGING



**NASHUA**  
*Corporation*



## MODERN PACKAGING

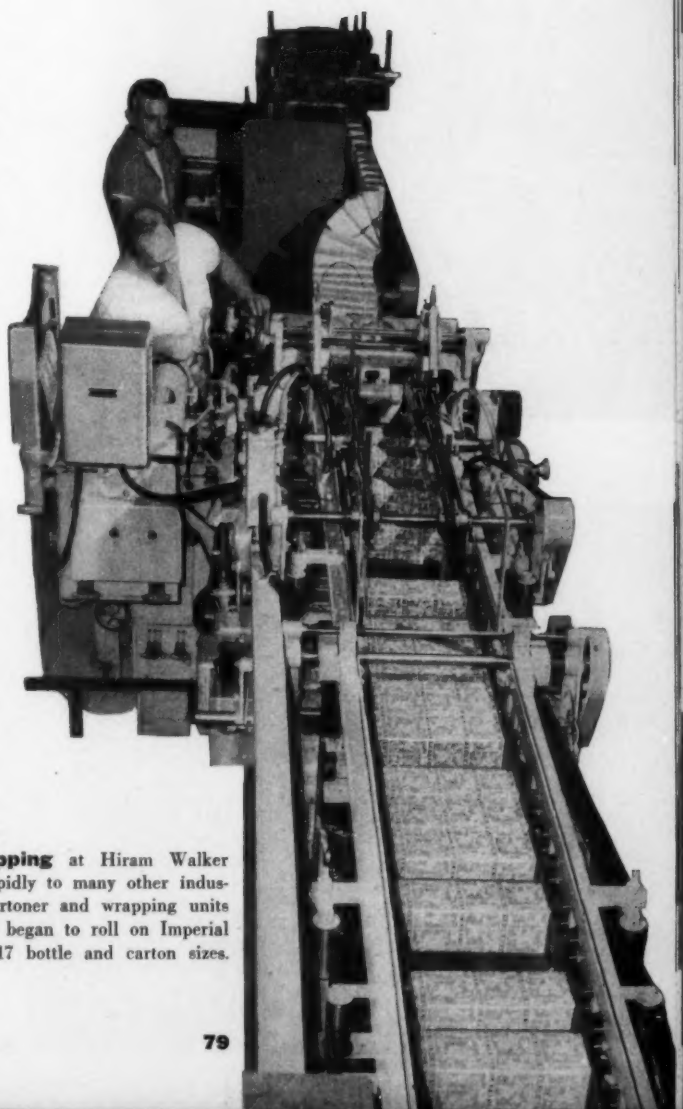
### Gift tip for '56: more pre-wraps

*Trend to the factory wrap that makes a gift ready  
to present stands out prominently in survey of '56 planning;  
good times boom all types of gift merchandise*

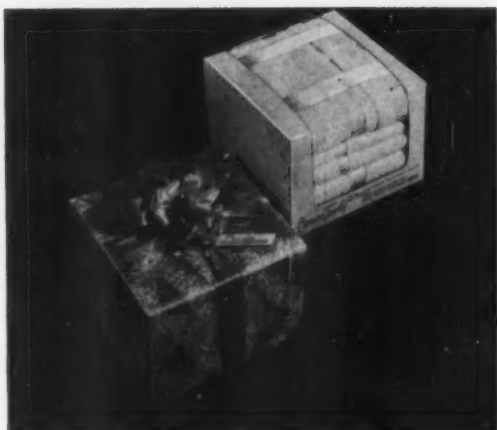
**P**re-wrapping is the word in 1956 gift packaging. Taking a cue from Hiram Walker, who really started it, and from other distillers who rushed to get into the act—and with a slight push from retailers who are only too happy to have non-commercial gift wraps applied at the factory rather than at their own time and expense—packagers in many important gift lines this year are studying the possibilities of basing their promotions on ready-wrapped and be-ribboned creations in which brand identification is sacrificed to retailer and consumer convenience.

Strange as it may seem—for the anonymous pre-wrap would appear at first glance to be a complete abnegation of the principle of brand-name promotion—the trend is unmistakably clear in MODERN PACKAGING's annual survey of gift-packaging activities, which are already well under way for the 1956 season.

MODERN PACKAGING's Reader Service Department is being kept busy answering requests for the names of suppliers and designers of wrappings of all kinds, as well as decorative boxes and gift folders. Purchasing agents' waiting rooms are crowded with suppliers' representatives called in to estimate on new decorative materials. Almost everywhere—not only



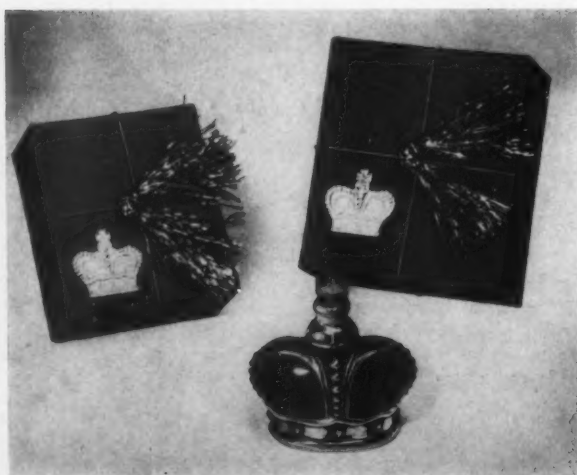
**Mechanized gift wrapping** at Hiram Walker starts a trend spreading rapidly to many other industries. Specially designed cartoner and wrapping units are shown on day the line began to roll on Imperial wrap. Equipment handles 17 bottle and carton sizes.



**Window box** for Cannon towel set on counter demonstrates contents of elegantly pre-wrapped packages which require no gift wrap by retailer. Gold and white paper wrap has applied sparkle dust design with gold and white trim.



**Repeat performance** over the last few years indicates success of pre-wraps for Richel products, a line with high regional acceptance manufactured by Daggett & Ramsdell. Violet wrap is one of three, distinguishing three fragrances.



in liquors, but in candy, cosmetics, cigarettes, household textiles, soft goods, stationery, appliances, baby goods, toys and others—a prime topic is the question of pre-wraps.

A marketer of an extensive line of gift-packaged soft goods, just back from a trip around the country, says that retailers everywhere are looking for gift-packaging procedures which save money and labor in this day when it is difficult enough just to get help for routine transactions during peak periods. When shoppers have to wait in line 20 minutes to half an hour to have their purchases gift wrapped, as they reportedly did in some stores last Christmas, something has to be done. The pre-wrap is the obvious answer.

Perfumery houses for years have been selling their products in pre-sealed packages. Nobody ever expects to get a bottle of Chanel or Lanvin in anything but a pre-wrapped sealed package. It is only one step further to make the wrap a non-commercial decorative one that needs no further wrapping by store or purchaser for the product to be presented as a gift. Several cosmetic firms, namely Matchabelli, Lenthéric, Lilly Daché, Hattie Carnegie—have employed this technique to some extent and apparently it can be done successfully if properly merchandised at the point of sale with display units and samples that show clearly what the pre-wrapped packages behind the counter contain. The whole force of the procedure, however, depends on how well this is done at the retail level.

Manufacturer-retailers in the confectionery field have been using gift pre-wraps on boxed goods for years, the shopper merely making his selection from an open selection on the counter.

Cannon Mills experimented during the last Christmas season with a beautifully pre-wrapped towel assortment sold by means of a transparent window-box sample on the counter so that shoppers could see what was contained in the pre-wrapped package. Competitors are already copying the idea.

But, of course, the spectacular example of 1955 was the complete line of distillery-wrapped gift merchandise done automatically on specially installed cartoning, wrapping\* and ribbon-applying machinery designed for this nation-wide project and which, reportedly, ran into an investment of mil-

\*Shown in the photo on p. 79 is the cartoner by R. A. Jones Co. and wrapping machine by Battle Creek Packaging Machines, Inc.

**Ahead of the times**, Prince Matchabelli introduced beautiful pre-wraps a few years ago, discontinued them when stores wanted to put on their own wraps. Crown seal gave subtle trademark identity. Now trend may be reversed with retailer shortage of labor for gift wrapping.

lions†. Success of the operation has had a profound effect upon the liquor field.

Hiram Walker reports that "results were phenomenal," with sales increases of more than 35% on some brands and countless instances of brand switches, particularly on large industrial gift orders of five cases or more, simply because the purchaser wanted the ready Hiram Walker "Luxury" wraps. And with its automatic equipment already installed ahead of everybody else, Hiram Walker expects to win greater year-round sales of its brands as gifts by using gift wraps suitable for any occasion.

Seagram also came out with distillery-wrapped gifts in time for the past holiday season, although no mechanical equipment was used. With the entire liquor industry competing for stand-out decanters and fabulous decorative packaging, it is highly probable that next year there will be not only more decanters, but decanters cartoned and handsomely distillery-wrapped ready for presentation as a gift when the shopper takes them out of the store. The liquor pre-wraps, of course, must comply with legal requirements by carrying removable cellophane overwrap or labels that carry mandatory data. These may be simply removed when the package is to be presented as a gift.

There's no reason why the tobacco industry—sorely in need of new promotions—could not do likewise. Every year cigarette and cigar manufacturers spend large sums for colorful gift cartons, sleeves and cellophane holiday wraps, but because they lack the personal touch of a gift wrapping, hardly anybody presents such packages as gifts without putting gift paper around them. Some brand in this field undoubtedly will get wise to the advan-

†See "Wines and Liquors," MODERN PACKAGING, Oct., 1955, p. 108.

tage of a ready pre-wrap and by-pass traditional methods.

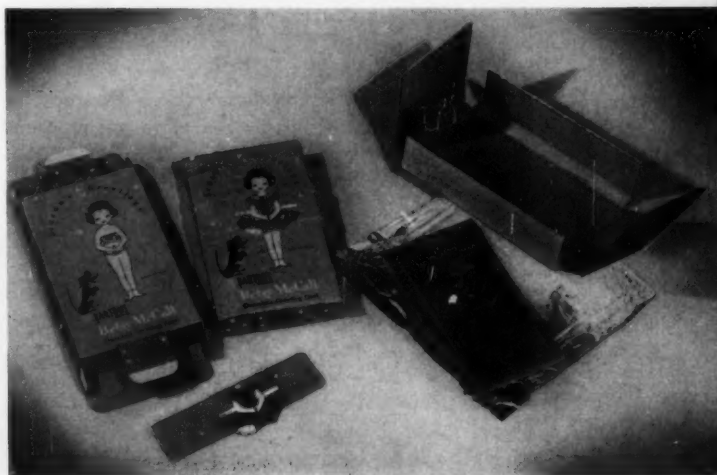
All of this pre-wrap activity calls for a new interest in decorative papers and foils that are smartly designed to provide the distinctiveness and originality demanded. It will open up new areas for wrapping materials which have lost ground the last few years due to the swing to carton packs. It also means

PHOTO COURTESY MELPRINT, INC.



**Cigar industry** is using an increasing number of holiday gift overwraps. General Cigar Co. put four packs of fives of its Robert Burns Classic and White Owl Invincibles in colorful rotochrome-printed cellophane overwraps that the retailer could remove after the Christmas season.

**Ready-to-mail** chocolate remembrances put in cartons with protective inserts proved fast sellers for Barton's. Betsy McCall carton shows paper-doll cut-out and package components which protect against breakage.







**Men's apparel** packaging is being given a strong gift slant. McGregor Father's Day items for 1956 feature a golf jacket packaged in a carton representing a golf bag; a sports ensemble in a box with a travel-theme design; knit shirts in printed acetate tubes.

**Corrugated chest** for assortment of Smile Pak foods shows unusual effect to be achieved with clever construction and colorful printing. Box has hinged lid and die-cut handles on ends.

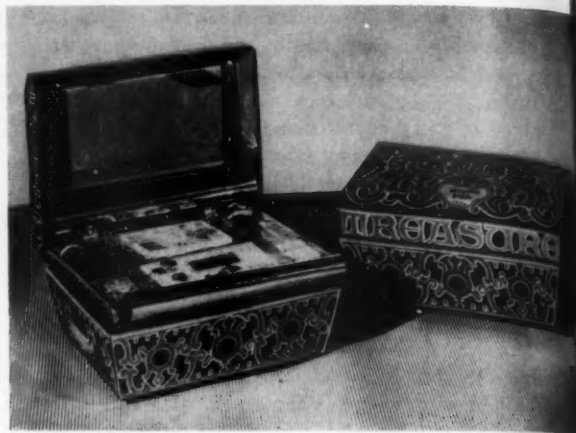


PHOTO COURTESY HINDE & DAUCH

new services and labor-saving techniques to handle the volume, some of which could be done more economically, perhaps, by contract packagers specializing in this field.

And the procedure cannot be adopted without a careful study of merchandising conditions for the products involved. In the department and specialty store field, certain stores pride themselves on the prestige of their own store wraps and the shopper may want the snob appeal of a wrap from that particular store. In such cases the pre-wrap is an unnecessary expense. For the vast majority of outlets across the country, however, this is definitely not the situation.

In the case of a line of products involving different sizes, colors, fragrances or styles, there is a need to distinguish these differences for the retailer on the outside of the pre-wrap. Apparently it is not an insurmountable problem, however, as Hiram Walker demonstrated by gift packaging something like 11 different brands and 17 sizes in different wraps and with the removable cellophane that carried the identification.

There is the essential of having point-of-sale samples that unmistakably show the customer what is to be inside of the package he is to receive and are displayed in a manner that the shopper can quickly grasp the idea. The pre-wrap itself should be easy to handle with scuff-resistant surfaces and without decorative elements that come loose or get dog-eared.

There is also the question of brand identity—although this is apparently not a problem once the

customer has been sold the brand at the counter and the gift recipient sees the brand name when the package is opened. Some firms, however, do carry the subtle suggestion of brand with the trade identification skillfully worked into an attractively designed and attached "to-and-from" card, or by a beautiful label seal.

Lastly, there is the question of cost and who pays. For a competitive advantage, one manufacturer may be willing to underwrite the cost, whereas another will not go to the added expense unless forced to it by competition. The final answer will be retailer demand for gift packaging that simplifies store operating problems in the same way that retailers have demanded factory pre-packs for staple items such as appliances, housewares, china and glass, etc.

The be-ribboned factory pre-wrap, of course, should not be confused with and in many lines cannot take the place of the gift-packaging put-up aimed to attract the shopper or the recipient of a gift by its novelty or elegance. But in many cases it could become an essential adjunct to these put-ups, which themselves can be sold from samples in visible display, as the modern solution to the tediously slow method of having store set-ups to add the gift wrap.

And to get an idea of the ever-increasing demand for all kinds of gift packaging, one has only to look at the retail counters. In every field, marketers are out to capture the potential extra sales that are to be won by dressing up their products with gift appeal. And the public, with more to spend, apparently is willing to pay for the extra packaging frills.



Specialty food departments are crowded as never before with elegant package presentations of cheese, cocktail snacks, cookies and cakes, condiments, jams and jellies, herbs, spices, special kinds of tea, glazed fruits.

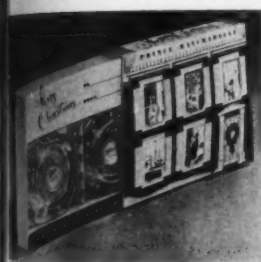
In hardware stores and discount houses, staple items from egg beaters to electric clocks are seen in colorful factory pre-packs, usually folding boxes, but ready for gift giving only after the additional

touch of the gift overwrap. Many of these colorful cartons are designed with picture-frame construction or transparent windows for display, but with telescoping covers and inner platforms and inserts so that the packaging is sturdy enough for mailing or shipping without further corrugated packing by the retailer or purchaser.

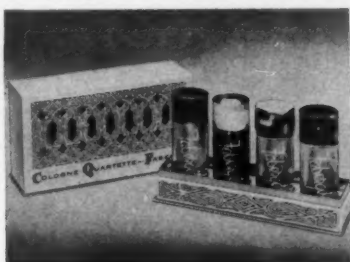
Great strides are being made in the presentation  
[Continued on page 220]

## Twelve top-selling cosmetic gift packages

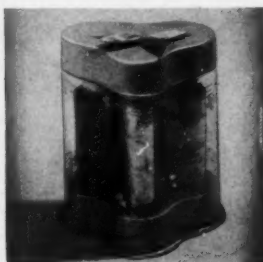
**Leading cosmetic** firms were asked by MODERN PACKAGING: What was your top-selling gift package for the 1955 season? The photos representing each company's selection of its own stand-out may prove a useful guide to planning.



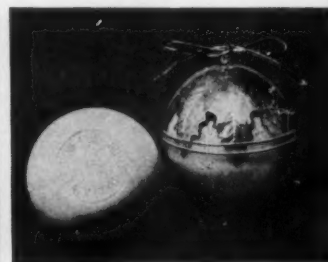
Prince Matchabelli—  
Merry Colognes.



Fabergé—Cologne Quartette.



Primrose House—  
Young and Pretty.



Elizabeth Arden—June  
Geranium bath soap.



Fuller Brush Co.—Dudin'-up Kit and Miss Debutante. The latter, the company says, is "a package that never dies," continued year after year.



Tussy—Midnight gift set.



Coty—Perfume Harp.



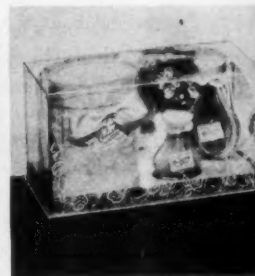
Lenthéric—Tweed Perfume and Mist set.



Charles-of-the-Ritz—Grenadier.



Yardley—Lavender  
Remembrance.



Houbigant—Three-piece  
Chantilly set.

# The first lined poly tubes

*Their application to a pharmaceutical ointment and an industrial grease demonstrates the potentials for new plastic inside coatings that stop permeation*



**Handkerchief test** proves that no grease has migrated to surface of this Esso internally coated polyethylene tube. Special formulation of vinyl applied to interior walls reportedly does the trick.

**P**ackagers in many product lines will watch with keen interest the acceptance and performance of internally coated polyethylene tubes, which are now, for the first time, being used commercially.

Eli Lilly & Co., Indianapolis, is packaging a doctor's sample of anesthetic ointment in a coated tube. In a widely different field, Esso Standard Oil Co. has packaged a 2-oz. test size of "Nebula 2" multi-purpose industrial grease in a similar tube.

The purpose of the interior coating in both these instances is to provide a barrier against grease and oil transmission, a property in which polyethylene alone is notably weak.

Polyethylene, of course, has extremely advantageous and versatile properties over a very wide range of packaging applications. But in addition to

its permeability by most greases and oils, it is also deficient in holding some organic solvents and it has especially been unacceptable for certain products whose quality depends on aromatics or flavorings.

The new internal coatings will be of interest to packagers having any of these product problems.

Reportedly, as high as 50% of the product types that might use polyethylene containers have up to now been barred by polyethylene's permeability. Thus, a big goal that the producers of polyethylene bottles and tubes have long had in mind is the development of a container that can invade important new segments of the market—including the huge-volume tooth pastes and shaving creams, foodstuffs like ketchup and mustard, medicinals such as oint-

ments and lotions, and industrial products such as lubricants and solvents.

Late last fall two producers\* of polyethylene bottles and tubes simultaneously announced that they would offer internally coated containers. Although they have arrived at their solutions with different constructions and coatings, the objective is the same. Meanwhile a number of packagers have been testing the lined polyethylene container to determine its practicality for specific products.

Eli Lilly, however, is regularly packaging its doctor's sample of "Surfacaine" (Cyclomethycaine, Lilly) in a small internally coated tube  $\frac{1}{2}$  in. in diameter and  $2\frac{1}{4}$  in. long. The tube orifice is approximately  $\frac{1}{8}$  in. in diameter. The closure is a custom molded black phenolic cap. The tube is white and the printing is black.

According to a spokesman for the Eli Lilly firm, the company needed a novel salesman's promotion item that would resemble the regular trade package, a collapsible metal tube. The internally coated polyethylene tube was chosen because it would fulfill this requirement and would hold an ointment-base product. The small-size special-purpose container is also of interest to the company because it affords a chance to study package performance with a view to considering lined polyethylene containers for other products. The soft feel of polyethylene, its clean, always-neat appearance, its light weight and strength are factors that make polyethylene tubes a desirable container for medicinals, in Lilly's opinion.

The Esso company must of course have the coated

\*See "Packaging Institute Forum," MODERN PACKAGING, Dec., 1955 p. 127.

**Test user** of the new coated tube, Esso sees merchandising advantages in polyethylene container for multi-purpose industrial grease, in that tube does not collapse or roll up and, therefore, retains full brand identity during long use.



**Regular user** of lined polyethylene tube is Eli Lilly's Surfacaine ointment, with a petroleum base which would walk right through an unlined tube. This is a physician's sample. Lilly is studying other applications for the lined tube.

tube if it is to use a polyethylene tube for lubricants at all. Grease migrating through unlined container walls causes the polyethylene to become flabby and the tube's outer surface greasy to the user's touch.

It has been found that the internally coated tube effectively resists the permeation of grease. The tube remains firm and springy and the outer surface remains clean and pleasant to handle. Pleased with the performance of its test packages, Esso may soon market certain of its industrial greases in an 8-oz. internally coated polyethylene container.

According to a spokesman for Esso, a major advantage the firm expects to obtain from its use of a lined polyethylene tube is the fact that the tube does not wrinkle, bend or crack on the shelf or in the shop, no matter how many times the tube is handled or squeezed. Moreover, since the tube is not rolled up to dispense grease, brand identity is maintained right up to the moment when the package is discarded. Esso now considers package appearance and brand identity so important for its industrial product packages that it is willing to take the important step of changing from the metal tube, a package that otherwise has proved so eminently satisfactory from the standpoint of protection and convenience.

Esso has tested the 2-oz. coated tube extensively. Shelf-life and use-life performance are said to be good so far. The tubes empty well and the users comment enthusiastically about the new tube as a package for multi-purpose grease.

There has been much speculation as to the types of coatings to be used in polyethylene containers. Among the plastics that logically might be selected [Continued on page 218]

# Strip package for cheese slices

*Canadian producer achieves slice-by-slice  
protection and eliminates adherence  
by sealing each slice individually  
in a continuous eight-slice film pack*

**T**he answers to two packaging problems that have long troubled most producers of sliced process cheese may have been found by the Crescent Cheese Co. of Montreal—the enterprising company which made other packaging news last year with its vacuum-formed polyethylene container for cottage cheese.\*

Crescent's latest innovation is a method of individually heat sealing slices of cheese in a continuous strip of polyethylene-coated cellophane, then simply folding the hinged strip into the conventional sales unit of eight slices.

This gets away from previous difficulties of the single-envelope package for eight slices: (1) that, once the envelope was opened to remove one or two slices, protection for the remainder was lost and (2) that non-separated slices cut from a block of cheese tended to return to an inseparable mass under pres-

\*See "Polyethylene Formed for Food," MODERN PACKAGING, March, 1955, p. 106.

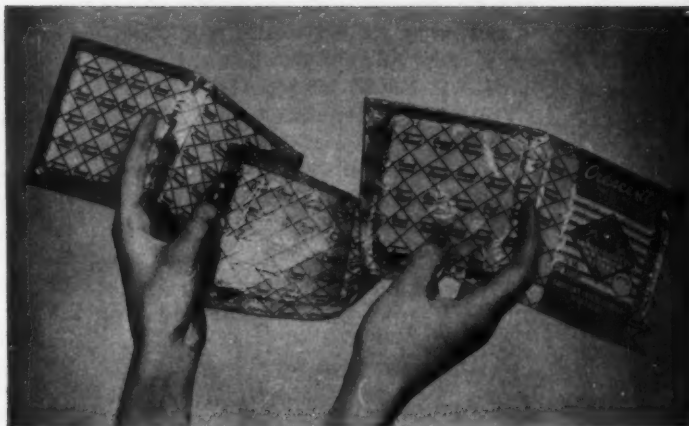
**Individual compartments** of printed polyethylene-coated cellophane keep slices from adhering, eliminate problem of protecting unused portions. Tear slits on corners make them easy to open.







**Oblong pack**, sold under Crescent Cheese Co.'s own name, is two slices wide, four deep. Film is patterned in diamond design, with printed cellophane band. Chipboard insert gives package support.



sure and heat when packages were stacked for shipping or display. Even if slices could be separated (shingling was a great help in this), they tended to tear or break. Vacuumizing the envelope, although it gave excellent protection, increased the pressure on the slices.

Although Crescent's new package obviously uses a greater area of film, it successfully uses a lighter and less costly material and the two brands of process cheese currently being marketed in this manner (under Crescent's own name and under the "Fields o' Clover" brand for Steinberg's Super Markets) still retail for from two to four cents less than other leading brands. Crescent reports, however, that the new package costs two cents more than the conventional pack previously used.

Consumer reaction has, reportedly, been highly gratifying. If the housewife wants to make a single cheese sandwich, she need only tear off a single compartment of the strip package and tear it open readily through one of the sealed edges. The remaining slices retain all of their original packaging protection.

Crescent Cheese had been trying for several years to find a way of both benefiting from the many convenience features of sliced cheese and of eliminating the two disadvantages of the conventional package. And this would have to be done, the company knew, using square slices of cheese that had been cut from a loaf. Slices of this type have a much greater tendency to stick together than those produced, as Kraft's are, by a patented process from a continuous "ribbon" of cheese.<sup>†</sup>

Working closely with a Canadian package-design firm, which did extensive market research and ex-

perimentation with new types of packages, the solution was finally discovered.

Important factors in making the new package possible were the adoption of a new automatic method of slicing the loaves of cheese and the use of high-speed unit-packaging equipment synchronized with the slicer. Two loaves are placed by hand on the feed table of the slicing machine and clamped in place. Two slices are cut off simultaneously and deposited on a conveyor chain. Next, fly fingers

**Square stack** is put up by Crescent for private-label brand sold by Steinberg's Super Markets. This package has eight slices lap folded into a single pile and uses different designs on the heat-sealed film and on the cellophane band.



PHOTO COURTESY TYP OF CANADA, LTD.

<sup>†</sup>See "Cheese in Slices," *MODERN PACKAGING*, March, 1950, p. 112.

strip the cheese slices off the conveyor and set them in position on the unit-packaging machine, whose action is synchronized with that of the slicer at a speed at present of 160 slices per minute.

The unit packager, an adaption of a standard-model machine, has a short in-feed conveyor bed on which a lower web of polyethylene-coated cellophane travels, becoming, in effect, a moving conveyor. Upon this, the individual slices of cheese are automatically deposited at uniform intervals.

Another web of printed cellophane-polyethylene is brought down on top of the cheese and the two layers of film with the row of cheese slices between enter the sealing rollers. Pockets in these rollers fit around the slices and, as the "sandwich" passes between them, each slice is heat sealed on four sides. More advanced machinery is now being built which is expected to boost the present production rate.

The seal area between each two slices is perforated and tear slits are incorporated on all four sides to make the individual wrapper easy to open. After every eighth slice, a cut-off knife severs the continuous strip.

No vacuum is drawn during the sealing operation, since Crescent believes that the present method yields a product that has adequate shelf life.

Once the strips of eight transparent-wrapped slices are obtained, they go into either of two sorts of consumer package.

To be sold under Crescent's own label, the cheese strip is folded in four laps, each consisting of two side-by-side pockets. The oblong package produced in this way is supported by means of a chipboard insert and fastened by a heat-sealed, printed cellophane band. The film enclosing the slices is printed in a repeating diamond design, with the brand name "Crescent Cheese" alternating in English and French.

The wrap-around band features a larger diamond in which "8 individually wrapped slices" is played up—in English on one side, in French on the other.

A large share of Crescent production of the new packages is turned out as a private-label item for Steinberg's Super Markets, one of the largest Canadian food chains. For this avenue of distribution, the strip of cheese slices is lapped back and forth upon itself to form a single stack of eight and no insert is used. This package also is secured with a printed cellophane band.

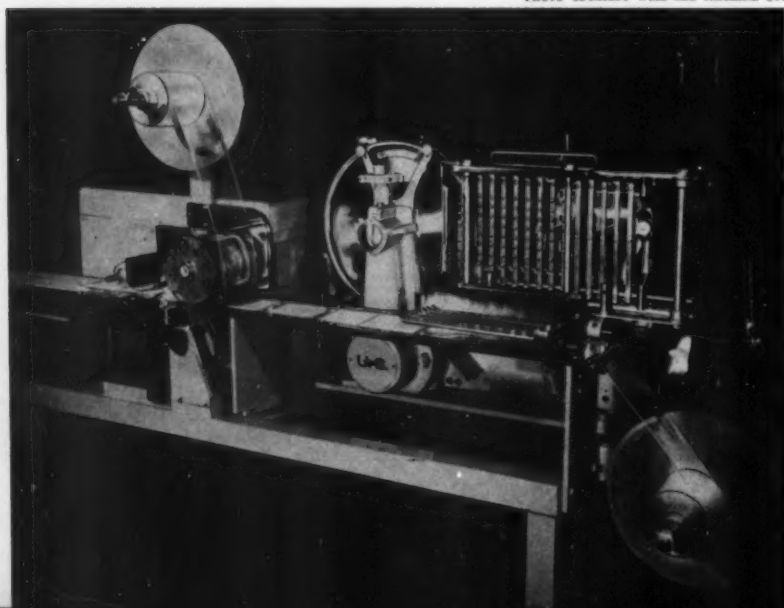
Otherwise, the package design is entirely different. The wraps on the slices are printed in a square pattern (in white, rather than color) with the name "Steinberg's" and the brand "Fields o' Clover." "Fields o' Clover" is also featured on the outer transparent band, again with both English and French descriptive information.

Steinberg's were the first to use the new type of packaging and their research and merchandising departments contributed to the developmental work.

Although no effort has been made as yet to apply this packaging principle to other products, it appears that it may be useful for sliced luncheon meats and for other thin, flat objects that might benefit from individual compartmenting.

**Credits:** "Cellothene" polyethylene-coated cellophane supplied by Cheslam Corp., Div. of Chester Packaging Products Corp., 684 Nepperhan Ave., Yonkers 2, N. Y., through Twinpak Ltd., 6525 Somerled Ave., Montreal, and printed by Polycraft Co., Ltd., 2999 Broadway, Montreal. Strip-packaging machine by Wrap-Ade Machine Co., Belleville, N. J. Slicing machine by U. S. Slicing Machine Co., La Porte, Ind. Package conception and design by Samuel Fogel Associates, 2310 Holt St., Montreal. Machinery consultation by VuPak, Ltd., 4616 St. Catherine's St. W., Montreal.

PHOTO COURTESY WRAP-ADE MACHINE CO.



**Machinery set-up** that does job for Crescent is a very closely integrated combination of slicer (right) and continuous heat sealer. Base web of film starts from roll at right, carries individual slices evenly spaced into sealing unit where the second web of film is applied from above.

# Efficiency in cartoning

*Bennett's takes more kinks out of the problem of paint colors by installing a single, adjustable line that handles 1,322 different colorants in five sizes*

**T**o witness the real power of packaging in solving production and merchandising problems you have to turn to a field such as paints, where stop-and-go operations are commonplace and where the efficiency of a check-out counter is still only a gleam in the retailer's eye.

The marketing of paint runs head-on into some of retailing's most unyielding obstacles.\* Paint is a seasonal product consumed in greatest volume during the spring and summer. Paint sales probably involve more clerk selling than any other trade commodity now being merchandised.

Paints involve an average investment of \$5.14 per color for every color the retailer has in stock. The typical store stocks an average of 226 different colors, which means an investment of \$1,161, plus an extensive investment in shelf and storage facilities to accommodate the hundreds of different can sizes.†

Faced with such a merchandising picture, the marketer can reasonably ask: "What can packaging do with a problem like that?" The question is a good one to ask in any product line.

Where paints are concerned, the answer is particularly impressive. Today's packaging techniques have enabled Bennett's, manufacturers of paints and colorants in Salt Lake City, Utah, to offer five times as great a color variety, with an inventory cost about one-third less than that of the more-limited selection.

Bennett's originated its "Colorizer System" in 1937, when it first offered a selection of 54 colorants packaged in one-shot collapsible metal tubes. This system now makes about 1,322 different colors available and distribution has become worldwide.

From the standpoint of the retailer and the consumer, the Colorizer System is simplicity itself. The retailer stocks white or neutral paint in cans and colorants in tubes. The customer selects any one of 1,322 colors as freely as would a professional decorator. The tube of colorant, identified by number on a chip or color chart, is emptied by the clerk or



**Size range,** from smallest to largest. Side opening facilitates hand fill. Five sizes of unit carton containing one-shot colorant tube are handled by a single former and closer with change parts. Another machine is similarly adjustable to five different sizes of master cartons.

customer into a can of base paint. Mixing produces the desired hue.

This system, or something like it, is now used by several paint manufacturers. But there are unique features in the modern techniques which have revolutionized Bennett's package-production line.

With a single, automatic line, usually operated on two shifts, the company has turned out 7 million tubes of colorant during the past 12-month period. An 8-hr. production average approaches 10,000 tubes per shift.

The start of the preparation of Colorizer colorants takes place in the paint factory. It is there that the colored pigments and vehicle (liquid) are ground in steel ball mills and stored in 250-gal. tanks to await standardization. The standardization process involves correcting a particular batch of colorant for tone to the proper standard. The colorant is then ready for the production problem of packaging into lead and aluminum tubes.

The packaging operation has eight basic steps:

1. Tube filling, closing and crimping
2. Empty-carton forming

\*See "Paints," an Industry Survey, MODERN PACKAGING, Jan., 1956, p. 104.

†Figures cited are from a survey conducted in 1952 by W. H. Day of Ohio State University.

3. Carton loading with colorant tubes
4. Carton closing
5. Carton imprinting and coding
6. Tray forming
7. Placing six cartons in a master tray
8. Packing trays in shipping case for transporting to finished-goods storage area

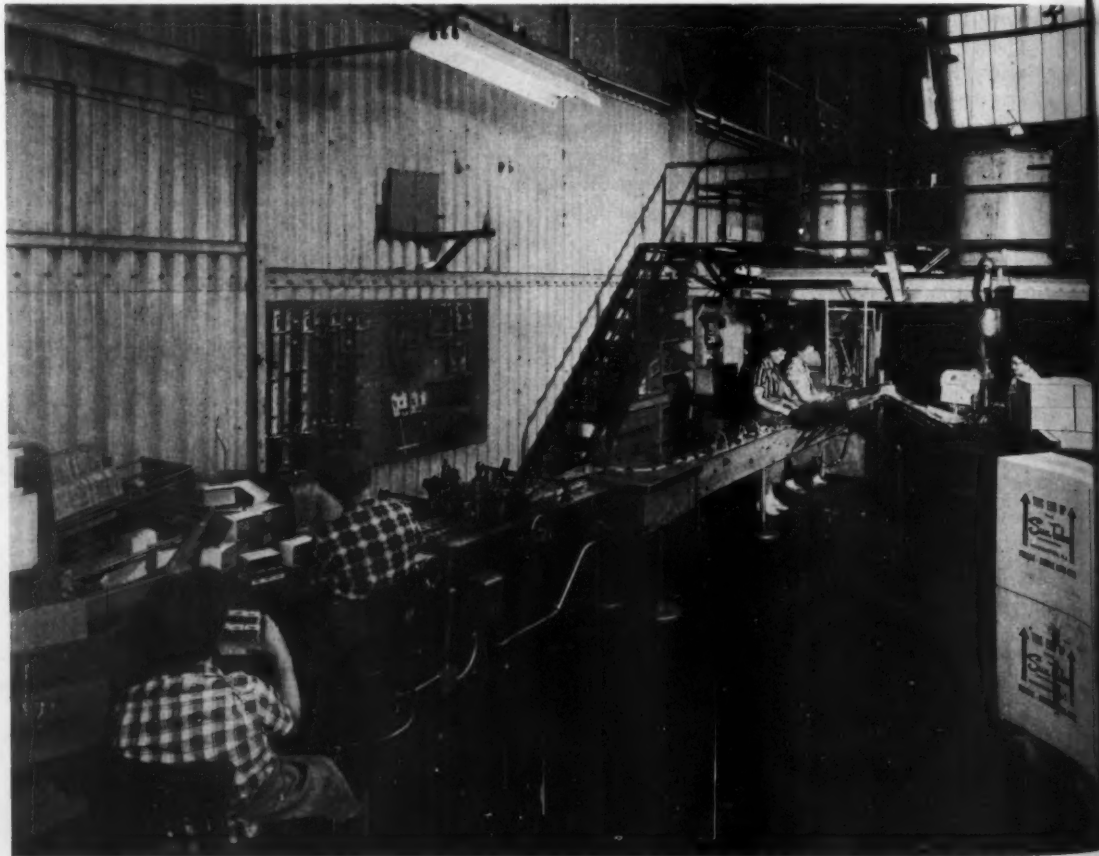
The colorant is fed into the tube filler, which is operated by one girl at an average rate of 60 tubes per minute. The filled tubes are conveyed to a large sloping metal tray where they are accumulated (to build up a reserve) before being loaded into lock-tab cartons. This carton loading is done by one or two operators, depending on the size of the tube. At this point the cartons, having been formed by an automatic machine and held positively on a chain conveyor, pass in front of the loaders. The loaders place the filled tube from the accumulation tray into

the carton. Unusual is the fact that these are side-opening cartons to facilitate hand loading.

The loaded carton enters a closer which tucks the side flaps and closes the carton automatically. The loading and closing sections of the cartoner are adjustable for width, height and length of five different sizes of cartons. This change-over is accomplished by moving calibrated locking hand-lever pointers to marked positions and by replacing certain sized parts. This part of the change can be accomplished in a matter of minutes.

The next step is to pivot the loaded carton 90 deg. before it enters a coding machine for imprinting a color-identification number on the end of each carton. Six loaded cartons are placed in a lock-tab master tray which is similarly set up, open, by an automatic machine. This tray former operates at one-sixth the speed of the carton line, or 10 trays

**Over-all view** of single Bennett's line that produces 7 million packages per year. Starting at right background, trays of empty tubes feed in on sloped conveyor; are filled with colorant from overhead tank and fed to cartoning line, meeting unit cartons set up by new machine at far end; tubes from accumulating table are dropped in by hand; lock-tab cartons are closed on conveyor line and enter machine which imprints color identity and, finally, are loaded by hand in master tray-cartons set up on machine at far left.





per minute. The trays are packed in a shipping case (4-doz., 8-doz. and 12-doz. quantities) for palletizing and fork-truck delivery to the finished storage area. An automatic case stitcher is used.

In addition to the regular operators, the line employs a supervisor, mechanic and checker for spot weighing the filled tubes for accuracy.

Some of the advantages of this type of production line summarized by Orson Goodyear, Bennett's production manager, are:

1. The pre-printing of cartons is eliminated
2. Rapid change-over of machines accommodates five different sizes of tubes and cartons
3. Accuracy of fill is held to allowable limits of 0.1% by weight
4. Layout and line operation are one-level
5. Lower unit costs are achieved, particularly on any runs of over 8,000 tubes

A noteworthy feature of the self-locking carton is the tamperproof closure. Once locked in, the tube stays with the carton, identifying its color number.

The extent of improvement in packaging-line operations can be gauged by comparing the new line with the previous operation.

Under the previous system, Bennett's set up its cartons and trays with a separate forming machine for each size used. The cartons then dropped down a chute into a bin. The cartons were finally hand closed after a tube of colorant had been inserted. The filling and packing operation required two tube-filling machines, two carton set-up machines, various bins and conveyors, a two-level layout, 10 packaging people, a printing machine and operator.

Bennett's new line enables the company to enjoy the benefits of long-run production. A cycle system of production scheduling has become practical so that inventories of raw materials and finished stock can be kept in better balance.

**Credits:** "Kliklok" cartons and master trays supplied by Container Corp. of America, 38 S. Dearborn St., Chicago. "Kliklok" Model L-F carton-forming and closing machine and Model B-F tray former by Kliklok Corp., 405 Lexington Ave., New York 17. Collapsible-tube filling and closing machine by Arenco Machine Co., Inc., 25 W. 43 St., New York 36. "Markocoder" imprinting machine by Adolph Gottscho, Inc., Hillside 5, N. J. "Silverstitcher" carton-stitching machine by Acme Steel Co., 2840 Archer Ave., Chicago 8.

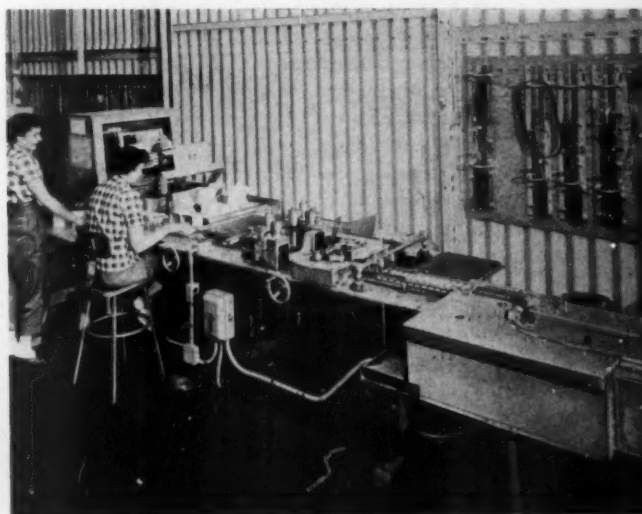
**End of line,** showing, at right, how carton makes turn at end of closing unit and lines up to run broadside through imprinting machine and, at left, discharge of set-up master trays from second carton former to be immediately loaded by hand. Note, on two wall boards behind line, the change parts used for four other sizes of cartons.



**Tube filling** must be done with great accuracy to insure right proportion of color mix.



**Start of line,** showing close-up of the versatile machine that sets up any one of five different carton sizes and deposits it open on the conveyor line, ready for tubes—coming from tube filler at right—to be dropped in by hand.





## Kiddieproof cap

*Abbott acts to end the menace of flavored aspirin by adopting a trick, spring closure that's easy for adults, but too hard for tiny fingers to open*

Cap tells story of closure principle new in pharmaceutical industry and of possible film being significant "to open, press down, to close, press down." Two too many to read won't discover the trick, or have strength to work it.



**Pressing center** of cap causes segmented, locking skirt to snap outward.



**Opened,** cap lifts off. The bottle reveals wide mouth and special finish designed specifically to fit this cap.

**H**aving made children's medicines so palatable that they taste like candy, the pharmaceutical industry is now concerned over the possibility that small children may actually regard pills as confections and raid the medicine chest when Mother's not watching. Public attention recently has been called to several deaths of infants attributed to excessive consumption of flavored aspirin tablets.

Of considerable interest and significance, therefore, is the adoption by Abbott Laboratories, Inc., for its new "Dulcet" aspirin tablets for children, of a bottle with a special type of spring-steel closure which can readily be opened and reclosed by an adult, but is not likely to yield to tiny fingers. The "kiddieproof" closure ("new safety cap keeps little fingers out") created a stir when it was nationally announced at a recent New York press conference.

The "press to open" type of closure, with a segmented skirt which snaps outward to release when firm downward pressure is applied to the slightly domed top, is familiar to industrial products, on

cans and drums, but has seldom been seen on consumer-size bottled products.

Abbott, however, saw no objection to using a wide-mouth bottle for tablets and, in fact, concluded that a larger opening would be a convenience factor.

For reclosure, the cap is replaced on the bottle and squeezed firmly on the sides, causing the flanged skirt of the cap to snap back tightly against the neck of the bottle. These operations require more strength, coordination and comprehension than can be mustered by the average pre-school child.

Several modifications were required on both the caps and the bottles to fit Abbott's needs. The neck section of the molds for the special Abbott bottles was altered to obtain the larger opening and type of finish required for the new cap. Now, by changing the neck section, the same sets of molds can be used for either the new snap-cap style bottles or the conventional screw cap.

By controlling the depth of impression of the star design in the top of the metal cap, the closure

manufacturer created a cap that required more than ordinary pressure to open—a somewhat ironic twist in view of the fact that the standard closures of this type have as a leading sales feature their easy opening and closing. Extensive testing by Abbott technicians, in cooperation with the cap supplier, was required to determine the exact amount of opening pressure desirable.

A cap liner consisting of saran-coated paper laminated to a combination white pulp and white felt backing was adopted. Even though the closed cap

can be rotated on the bottle if sufficient torque is applied, the resilient liner provides an effective seal against the entrance of moisture which might cause deterioration of the cube-shaped, pink tablets.

Made in two sizes to fit square 50- and 100-tablet bottles, the caps are lithographed with the Abbott trademark against a light blue background matching that of the paper label. Simple directions printed on the top of the cap read: "To open, press center. To close, press sides."

In introducing the Dulcet aspirin, which is of a new aluminum-salt type, Abbott also went to a redesigned label intended to minimize mis-reading of directions by adults. The new label, which wraps around three sides of the bottles, points out that the new product retains its candy-like flavor and stability, and features the warning: "Keep out of reach of children. New-type safety cap is designed to deter children from eating as candy."

Caps are applied on the Abbott packaging line by a hand-operated plunger device which seats the closures on the bottles and snaps them firmly closed. Automatic and semi-automatic equipment is also available for applying closures of this type.

The new concept of this closure as a safety device may suggest many other applications not only to medicines, but to products like disinfectants, inks and glue which can be hazardous if opened by curious young fingers.

**Credits:** "Upressit" closures and cap liners by Upressit Products Corp., Danbury, Conn. Bottles by Owens-Illinois Glass Co., Toledo 1, Ohio. Labels by National Office Supply Co., North Chicago, Ill. Counter display cartons by A. George Schultz Co., Milwaukee.



**To close,** press sides; the slightly domed top snaps back, the skirt is locked and the aspirin is safe from children.



**Saran-coated liner** in cap gives necessary water-vapor protection to new type of aspirin which is soft, cube-shaped, pink.

**Shipper sets up** into counter display. Pink and blue with a circus motif, the carton stresses child appeal plus the assurance of the new safety cap.



# HOSIERY

*The industry is struggling to break its packaging barriers,  
but is limited by entrenched selling systems  
in service stores—still the biggest outlets for hosiery*

**U**p to now, hosiery packaging—both men's and women's—has been split sharply between the vastly different selling requirements of conventional department and apparel stores (still the largest vendors of women's hosiery) and self-service outlets.

Most hosiery manufacturers package in several different ways to meet the different marketing situations—and hope wistfully for a happy meeting point.

## **The standard package**

Except for sporadic and isolated exceptions, such as the Altman Balta transparent tube package,\* the standard set-up box for quarter-dozen and half-dozen pairs for years has been and still is the favored

package for women's hosiery in traditional hosiery departments with traditional fixtures.

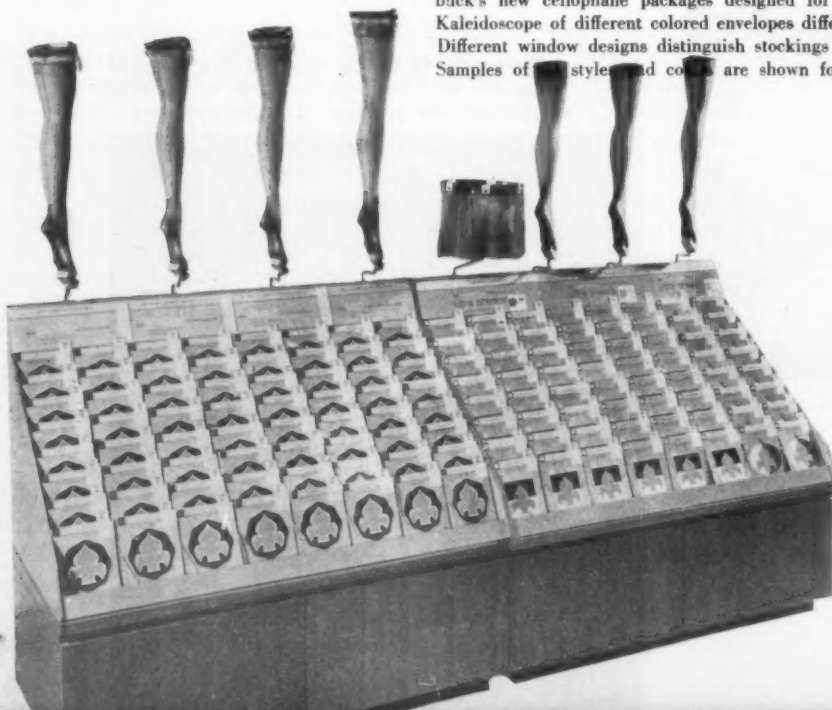
Every now and then a venturesome manufacturer tries to break tradition, as Cannon and several others did a decade or so ago with a cellophane-wrapped tray pack for individual pairs about a third the size of a standard box. Usually, they return in time to the traditional box.

"If a new package form doesn't get very far," says one spokesman for the industry, "you can figure there's a good reason for it."

Hosiery manufacturers may deplore the reluctance of retailers to change their fixtures to fit new package shapes and sizes. But with the multiplicity of brands, sizes, colors, lengths, gauges and deniers, such variations as the full-fashioned, seamless and now stretch styles, retailers can scarcely be blamed

\* See "Pre-Sealed Hosiery," MODERN PACKAGING, Dec., 1947, p. 102.

**Powerful color interest** in mass display is offered by Sears, Roebuck's new cellophane packages designed for complete self selection. Kaleidoscope of different colored envelopes differentiates stocking styles. Different window designs distinguish stockings in various price groups. Samples of style and color are shown for customer examination.







**Traditional fixtures** keep revolutionary package constructions from making much headway in conventional hosiery departments, where set-up box still reigns. But there's a big trend to gift sleeves which go right over regular boxes, such as smartly designed gift-card folder Arnold Constable salesgirl is putting on Larkwood Stocking X package.

for wanting standard packaging in standard fixtures.

And until something better is found, and something the entire industry will agree and standardize on, the standard set-up box, usually about 7¼ by 9½ in. with inside tissue folds around each pair of stockings, apparently is it. The set-up box gives satisfactory protection, encourages multiple-unit sales and is easiest for the salesgirl to handle when she must show the stockings to a customer, even though many surveys now indicate decreasing shopper resistance to pre-sealed packages.

The individual manufacturer has little chance of revolutionizing packaging practice in an industry where some 630 firms are making full-fashioned hosiery in about 730 mills and in which the three or four largest manufacturers—namely Berkshire, Burlington, Chester H. Roth and Chadbourne-Gotham—each can claim no more than 2 to 5% of total industry sales.

#### **The self-service package**

For self-service selling the packaging requirements are completely different. And as more outlets turn to this method of selling, the pre-sealed cellophane package containing just one pair of stockings is rapidly becoming a widely accepted standard because of its transparency, its protection against handling and its efficiency in small-space display racks. Such packages cannot be too small and compact, however, lest they encourage pilfering; best practice is to use a paperboard backing for bulk.

Many kinds of packages have been tried in self service—folding carton packs, over-sized set-up boxes, even 22-in.-long transparent tube packs to

make a package difficult to secret†—but the cellophane pack seems to be winning out.

It should be noted, however, that hosiery manufacturers using this type of package are looking for a practical transparent film with greater strength and longer shelf life than cellophane.

How far these transparent unit packs will edge their way into new markets will depend on how extensively hosiery departments in the future turn to self-service selling. According to a National Retail Dry Goods Assn. study in a large urban area, the percentage of hosiery sold in department stores has been decreasing since 1952, has remained about the same in variety stores, has moved up in hosiery stores and has increased in supermarkets from 2.6% in 1952 to 10.9% in 1955.

#### **Industry situation**

According to the National Assn. of Hosiery Mfrs., Americans are spending annually about \$1.3 billion

† See "Help Yourself Textiles," MODERN PACKAGING, July, 1952, p. 77.

## **Industry Survey**





**Stretch-sock packaging** evolution is illustrated by Fruit-of-Loom series. Left to right: Earliest package had to educate consumer to new product. On next package "Stretch" feature was given more emphasis. Later, as stretch socks became known, emphasis on this feature could be reduced, with more prominence to colors seen through window. Today, with numerous styles and patterns, socks are stretched over insert board to display designs.

**Folding window carton** for Esquire Expand-O Socks that protects socks, yet permits shopper to see and feel texture without having to open the package, reportedly has given this firm a big advantage over its competitors.



for all kinds of hosiery. The average woman buys 14.4 pairs of nylons a year; the average man, about 12.4 pairs of socks. Purchases of children's socks average about six pairs a year per child.

In addition to the 730 mills making women's full-fashioned hosiery, another 66 mills are making seamless nylons and some 533 plants are making men's and children's socks. A trend to consolidation is indicated by the fact that there were 32 less mills making full-fashioned nylons at the end of 1954 than at the end of 1953, but part of this decrease was due to the fact that mills were being forced out of business by competition.

In this kind of a dog-eat-dog situation, each individual manufacturer must use every selling aid at his command. Much of the selling, of course, is on price. But beyond that there is evidence throughout the entire hosiery industry of a concentrated movement to merchandise more aggressively through the use of stepped-up package design to tie in with powerful promotions of stockings as fashion items and to win back gift business which the stocking industry has lost because it has not paid enough attention to the glamorous package presentation.

#### Examples of improvement

Chadbourne-Gotham is putting new life into its famous Gotham brand by playing up quality and long wear in elegant white, high-gloss boxes with restrained black and gold printing—gambling on the theory that a white box among the maze of brilliant colors that have been so popular the last few years

will stand out by sheer force of being completely different.

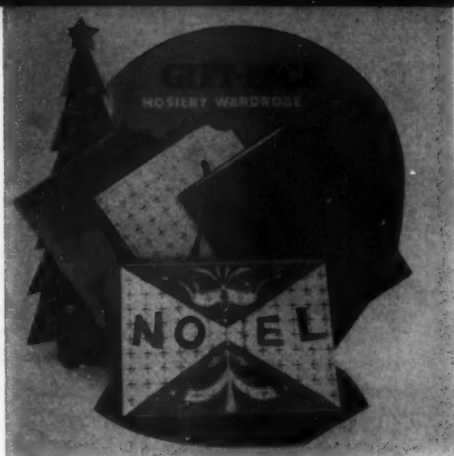
The number of firms now offering elegant gift sleeves of folding-box construction—which the salesgirl can slip over the standard stocking package when the purchase is made for a gift—is a marked indication of the trend toward renewed effort in gift merchandising.

Among those making an all-out pitch for gift business is Julius Kayser, whose new sales promotion director is Jane Trahey, fresh from Nieman-Marcus in Dallas, where, she says, "We became famous because we gift wrapped everything but the porter." Kayser started with a gift sleeve for Christmas and is following with others for Valentine's Day, Easter, Mother's Day—and a year-round folder suitable for any occasion. Kayser stockings are also appearing in beautiful new blue boxes identified with a new fleur de lis design which is to be carried through in all new Kayser packaging and advertising.

Sears, Roebuck is putting three pairs of its Royal Purple private brand nylons in a delicate, lavender-tinted transparent polystyrene hinged plastic box, useful as a permanent hosiery storage box—a successful seller for three years.

#### New products

An interesting new approach in men's and children's hosiery packaging has been brought about during the last few years by the invention of the stretch sock. Consumers first had to be educated to



**Stocking wardrobe** promoted by Chester H. Roth with this counter unit shows 60 gauge/15 denier in blue and white envelope; 51 gauge/15 denier in gold envelope and 60 gauge/15 denier evening sheer in magenta envelope. All three or any desired combination of three can be put in Noel gift envelope by salesperson when purchase is made.

the use of this new item, which some sources say now accounts for between 50 and 60% of all sock sales. First packages had to state clearly on the cellophane envelopes just what the product was.

Because the socks themselves look unbelievably small, the cellophane at first had to be printed to hide the unstretched size, but as the product is now known and is being made in numerous styles, it has been possible to devise packages that show these styles to advantage.

Chester H. Roth slips each pair of stretch socks over paperboard forms so that they may be viewed in stretched form and may be displayed smoothly on specially designed racks that give full view of the patterns and colors. For its Esquire branded socks, this firm has gained an advantage over its competitors with a folding window carton that permits the shopper to see and feel the texture of the socks without opening the package. The appearance of the package is credited by the company for a 46% increase in unit sales during the fall of 1955 over the comparable period of the previous year. Polyethylene is occasionally used for children's socks to provide packages with longer shelf life.

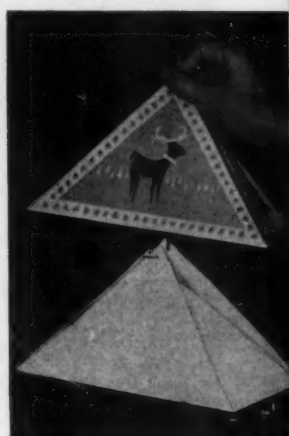
More recently stretch nylons have been introduced for women. Chadbourne-Gotham, a pioneer

**Seasonal promotions** will be carried right through the year by Julius Kayser to win gift sales by the use of appealing gift cartons and envelopes. Illustrated are those coming up for Easter and Mother's Day.

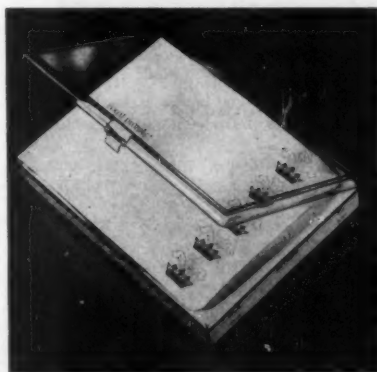
## Five approaches to hosiery gift packaging



PHOTO COURTESY BUREAU & PARTNER



**Christmas-tree ornament** constructions were popular Yule-time sellers with good display advantages. Van Raalte carton with gold cord and "to-and-from" tag fitted over regular box. Pull-off label bearing style, length, color and price speeded sales. Chester H. Roth colorful triangular carton featured reindeer with bead eye.



**Transparent styrene** gift box in a delicate lavender color for three pairs of Sears, Roebuck Royal Purple brand has been a popular seller for three years.





**OLD**

**NEW**



**Elegant white** with gold and black printing on high-gloss cover stock was selected to make Gotham packages stand out prominently among the maze of brilliant colors so popular for hosiery boxes during the last few years.



**For Nieman-Marcus** in Dallas, the first prestige stretch nylons made by Chadbourne-Gotham were given full glamour treatment with the entire package promotion appearing in French. Half-size boxes inside standard-sized boxes were used to give the new product distinction.



in this field, felt they needed the ultimate in glamour packaging to differentiate them from standard, full-fashioned nylons. And since the first ones sold at a premium price, it was feasible to package them elegantly. For the private brand sold to Nieman-Marcus, the company used an all-French theme, "Le Bas de Beauté," that flattered the ladies by printing all information about the stockings in French—with a simple key to the translation. Inside the standard box were two half-size boxes, each containing one pair of the stockings. For its Larkwood brand, which was introduced as Stocking X and X-90, Chadbourne chose the half-size box to differentiate completely this new type of stretch stocking from full-fashioned hose and to lend tone.

This has become the regular package form for these Chadbourne-Gotham quality stretch stockings, supplied with a simple counter unit for displaying and selling. Inserts contain complete information.

Chadbourne-Gotham devised a clever Christmas-card folder designed with smart illustrations that the salesgirl merely slips and ribbon ties over the cover of the half-size boxes to make a beautiful gift presentation when the shopper purchases a box of three pairs.

#### **Mechanization**

An obstacle to automatic hosiery packaging is the frequent change necessitated by the voluminous number of brands, sizes, styles and shades. All hosiery manufacturers are watching mechanization closely, but find they can't go too far with it unless  
[Continued on page 216]

**Half-size box** is now standard for Chadbourne-Gotham Larkwood "Stocking X" stretch nylons. Gift sales were spurred by gift folder that slips and ties over regular box.

**Typical** of today's self-service packs is this collection from Chester H. Roth. Disneyland pack has contest appeal for children. Men's sock package (center) is of printed polyethylene film. Large windows display patterns. Arthur Murray packages emphasize stretch nylons for women.





# Fuss-free shrimp

*Foil package offers new convenience*

*in the kitchen and demonstrates*

*new principle in mechanical pouch forming*

**T**he latest idea in heat-and-eat convenience is a paper-backed, one-piece, pouch-type aluminum foil package for frozen shrimp which goes right into the cooking pan without opening. Called "Shrimp Cocktail for Two," the package is just being introduced nationally by SeaPak Corp., St. Simons Island, Ga.

All the housewife has to do is pop the unopened package in a pan with two cups of boiling water, cover and steam 12 to 15 minutes, chill while still in the package—and the eight cleaned and de-veined, flash-frozen jumbo shrimp are ready to serve.

The new packaging reportedly helps to preserve ocean-fresh flavor since the shrimp is cooked without being soaked in water; it greatly reduces curling of the shrimp and avoids all cooking odor.

Forming of the package is interesting in that the completely mechanical operation is accomplished on a horizontal flow rather than on the vertical principle commonly associated with pouch or envelope types of packages. The foil material, supplied in roll form, is formed around the shrimp, which are



**Unopened package** goes into two cups of boiling water, is covered and allowed to steam 15 minutes. After chilling, shrimp are ready to eat.

arranged flat on the web as it is fed from the roll and travels to the folding and sealing units. The package is crimped and heat sealed along the lengthwise seam and at both ends, then cut off to length.

The packaging material is a lamination of 0.035 rotogravure-printed aluminum foil, overcoated for scuff resistance and mounted to light-weight tissue with a thin inner layer of extruded polyethylene.

The package and the mechanical method for producing it represent more than a year of development work by SeaPak, the foil supplier and the machinery manufacturer. SeaPak has set up the equipment in Port Arthur, Tex., expressly for this product.

The product has been introduced gradually in test markets, but will soon be nationally distributed in all major chains and independents with full-scale production now under way in the Texas plant.

**Credits:** Foil packaging material by Reynolds Metals Co., 2500 S. Third St., Louisville 1, Ky. Machinery developed by Hudson-Sharp Machine Co., 1201 Main St., Green Bay, Wis.

**Fresh flavor** is preserved, as no water touches the shrimp in the sealed package, which is opened only when ready to serve. Package holds enough for two cocktail servings.



## Colorful wraps for private-label frozen foods

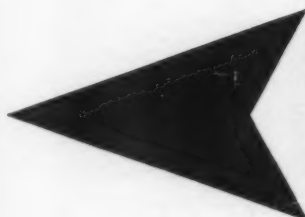


Further trend to private-brand frozen-food lines is indicated by National Tea Co.'s carefully planned full-color printed packages for frozen vegetables. Waxed paper overwraps now feature a six-color reproduction of the vegetable inside each package as it would look when ready to be served. The illustration takes up almost half of the visible surface of the package, extending from the top around two sides and one end for product identity at any angle.

Rapid identification of the contents is enhanced by the use of prominent lettering on all sides. The brand, "National Garden Fresh," is also given emphasis, with a diamond-shaped device for the company name on the top and two sides. The diamond pattern is repeated over all the surface area not taken up by product name and the full-color illustration.

All cooking instructions and other copy are printed on the rear of the carton, where they will not interfere with the easy-to-identify designs on the other five surfaces.

**Credit:** Overwraps by Western Waxed Paper Div., Crown Zellerbach Corp., San Leandro, Calif.



Design



Histories

## Separator insert keeps mints from sticking



Chocolate-covered thin mints made by the J. Lyons Co. are protected against sticking together in the carton by ingenious new separator inserts of paperboard, die-cut in a triangular pattern and scored to form tiny racks just large enough to hold each single mint. Held in place like this, the candies will not stick to each other or to the carton, and individual glassine separators are eliminated.

Lyons is using the new cartons in three sizes, each of which has a pair of windows cut in the top panel showing the contents—either one or two rows of candies standing on edge—through a cellulose acetate overwrap.

The cartons themselves are printed by gravure in a design which features realistic reproductions of the candies, shown both whole and in halves, together with a decoration of leaves and flowers of the mint plant. They are printed in chocolate brown, pink and green. The company's logotype appears on top and front panels.

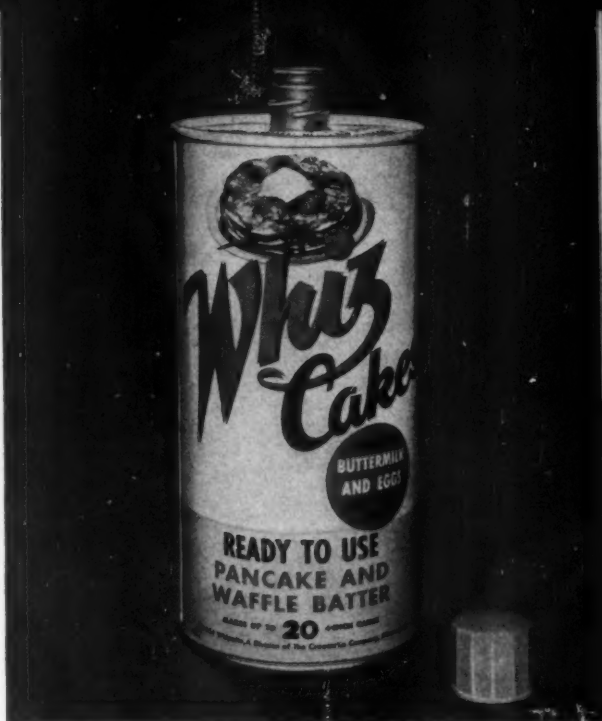
**Credits:** Cartons by the Robert Gair Co., Inc., 155 E. 44 St., New York 22. Surface design by Jim Nash, 405 E. 54 St., New York 22.

## Canned pancake batter

A seamless, dripless, full-lithographed metal can, similar to that used successfully for liquid detergents, has been selected for Whiz Cakes, a new ready-to-use frozen pancake and waffle batter now being test marketed in the Minneapolis-St. Paul area by Whipette, a division of the Creamette Co.

Even with the use of a prepared mix, making pancakes or waffles often can become a rather messy job, involving the dirtying of several mixing bowls and spoons. Now, even this last bit of work seems to have been eliminated. With the use of this new batter, the housewife has only to pour the ready-made batter onto the griddle. A 22-oz. can, retailing for from 45 to 49 cents, is said to contain enough batter to make 20 pancakes 4 in. in diameter. The batter contains water, wheat flour, corn flour, dry buttermilk, vegetable shortening, leavening, dried whole eggs, dextrose, salt and sodium benzoate, and may be kept for a long period in a home freezer. When desired for use, the can is removed from the freezer and placed in the refrigerator for from eight to 10 hours.

**Credit:** Cans by American Can Co., 100 Park Ave., New York 17.



Design

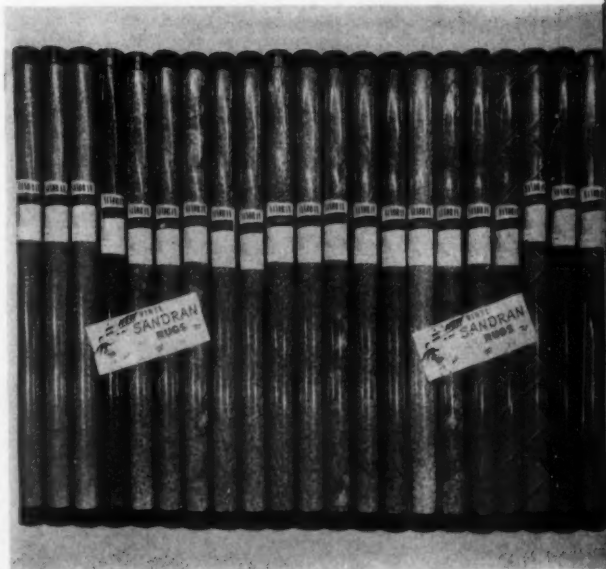
Histories

## Rugs in tubes

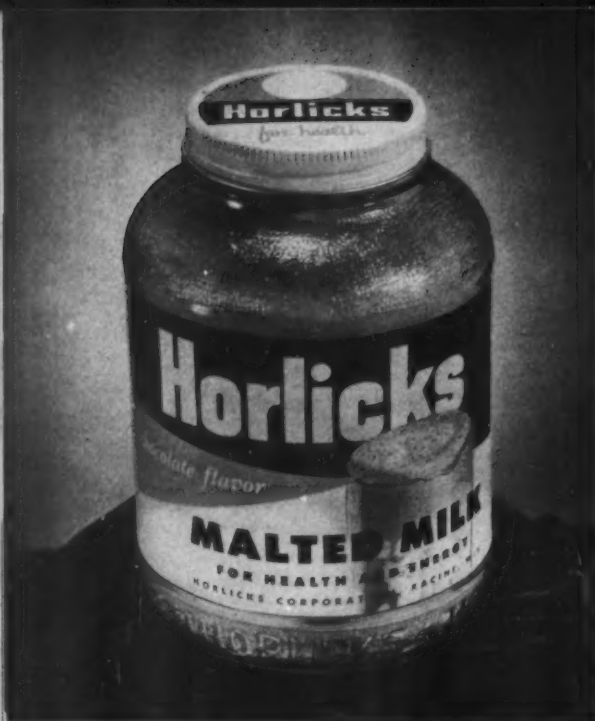
Giant tubular-shaped packages made by wrapping heavy-gauge cellulose acetate sheet around tightly rolled-up vinyl floor coverings give protection and visible display to Sandura Co.'s Sandran rugs. The 5-mil acetate-sheet wrap is secured by paperboard collars cemented to the ends. Inside the transparent wrap, a wrap-around paper label carries brand identity and complete cleaning instructions. For shipment to dealers, an outer wrapper of heavy kraft paper is also used, but is removed by the retailer before placing the rug on display. The transparent wrapper is built to withstand normal freight handling and the rug may be delivered to the purchaser without additional packaging.

With these transparent packages, a rug dealer may build displays which take up a minimum of space, yet let customers see the full widths of an assortment of 9-by-12-ft. rugs at a glance. Conventional display methods necessitated tearing paper wrappers each time a rug was to be examined, or stacking the rugs in open display.

**Credit:** Acetate wrappers by Celanese Corp. of America, 180 Madison Ave., New York 16.







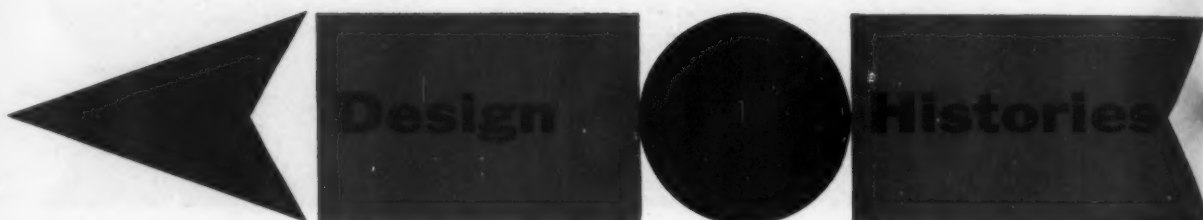
## Redesigned Horlicks

Horlicks Corp. has completed an extensive repackaging program for its natural and chocolate-flavored malted milk powder. Included are a new jar label, new cap design, new stacking 1-lb. jar which can be nested on the shelf without tipping and new tear-strip shipping container.

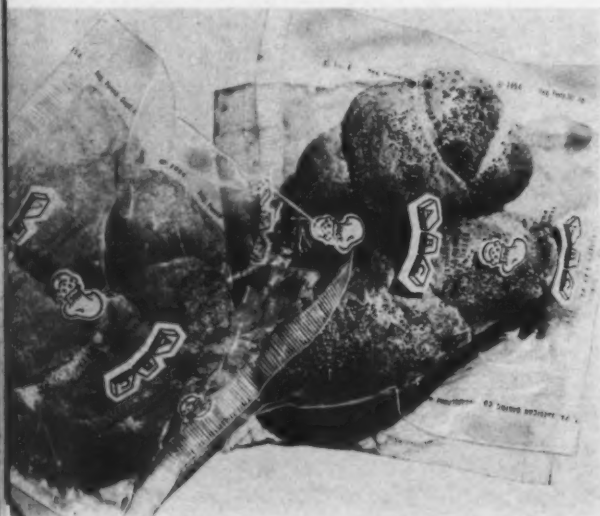
Setting the keynote for the redesign program is the jar label, which now makes strong use of black, red and yellow areas to give it a distinctive look. A full-color picture of an overflowing glass of malted milk is highlighted. Another change is the use of the same design and colors for both the natural and chocolate-flavored product, which now differ only in the lettering on the label.

The same colors and design are carried over onto the lithographed metal screw caps and shipping cartons. A series of six different recipe panels giving suggestions for new uses of malted milk is also included on the rear of the jars.

**Credits:** Jars by Armstrong Cork Co., Lancaster, Pa. Closures by Anchor Hocking Glass Corp., Lancaster, Ohio. Labels by Western Printing & Lithographing Co., Racine, Wis.



## Individual sealed bags keep rolls fresh



The problem of packaging hearth-baked rolls for the customer who wants just one or two—and not a package of six or a dozen—has long been a troublesome one for bakers and retailers. American Baking Co. appears to have found a solution by mechanically packaging hard rolls in individual cellophane bags.

The method was developed at the request of a Philadelphia food chain. The rolls are fed manually into a semi-automatic bag-making machine which forms the webs of printed cellophane around the rolls, heat seals and cuts the bags to length. Size adjustments can be made quickly to accommodate various sizes of rolls, with the very smallest products packed two to a bag.

The semi-moistureproof cellophane package is said to extend shelf life of the rolls by controlling moisture loss.

**Credits:** Bags produced from cellophane by American Viscose Corp., 1617 Pennsylvania Blvd., Philadelphia 3, printed by Lassiter Corp., 1143 E. Fourth St., Charlotte 4, N. C. "Verti-Pak" wrapping machine by Mercury Heat Sealing Equipment Co., 2601 N. Howard St., Philadelphia 33.



## Cheaper by the three-dozen?

The trend toward larger unit sales is spreading to still another product: eggs. Long packed only in conventional dozen and half-dozen sizes, eggs are now being sold in a package which holds three dozen, separated by conventional interlocking partitions in six rows of six eggs each.

One of the first companies to try out this unusual idea is the Volga, S. D., Farmers Cooperative Co., and it is being tested by at least six other firms in the East, South and Midwest. The package is actually a sleeve which slides over a standard partitioned egg-crate flat and filler. The three-dozen units, colorfully printed in a simulated-wood pattern, are being merchandised both in supermarkets and on door-to-door milk delivery routes.

Among the factors behind the introduction of this larger carton are said to be the increased capacity and efficiency of the modern home refrigerator and the housewives' desire to do the whole week's shopping at one time. The new carton reportedly holds enough eggs for a large family for a week.

**Credit:** Carton by Bloomer Bros. Co., Newark, N. Y.



Design

Histories

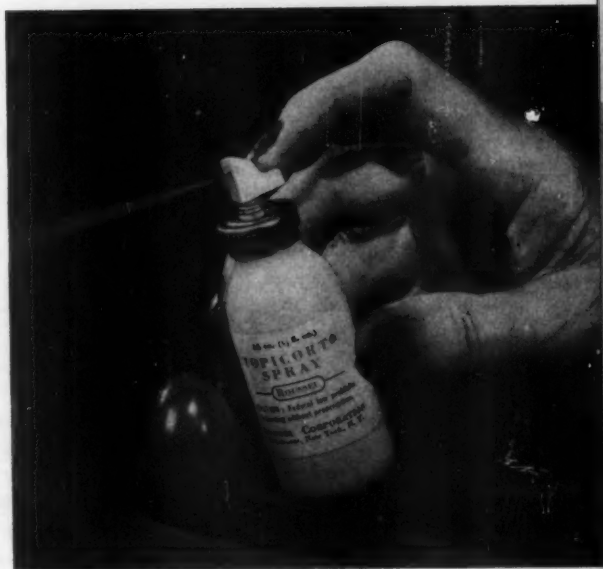
## Midget drug aerosol

One of the first small-sized glass aerosols to be used for an ethical drug product has been introduced by Roussel Corp. It holds only half an ounce of Topicort Spray, a preparation which may be prescribed by a physician for use to relieve certain skin conditions.

The container is similar in construction to glass aerosols now in use by a number of cosmetic manufacturers and is designed to spray the medication evenly over the affected skin areas.

The tiny pressurized container has been coated with vinyl to prevent the glass from shattering if it is broken. The valve is covered with a molded polystyrene cap, whose bright red color is set off by the opaque white of the base. A wrap-around label is printed in black and red.

**Credits:** Glass bottles and polystyrene closures by T. C. Wheaton Co., Millville, N. J. Valves by Risdon Mfg. Co., Naugatuck, Conn. Labels by Ajay Printing Service, 148 W. 23 St., New York. Aerosol filling by Fluid Chemical Co., Inc., 878 Mt. Pleasant Ave., Newark 4, N. J. "Freon" propellant by E. I. duPont de Nemours & Co., Inc., Wilmington 98, Del.





**Four products**, selected after extensive market tests, comprise new Holloway House frozen-food line of John R. Thompson Co. All carry the Holloway House trademark.

## Harder, glossier waxed wraps

*Using a special low-molecular polyethylene blend, they bring fine printing and high appetite appeal to Thompson restaurants' new heat-and-eat frozen meals*

**A**ppetite appeal—that subtle design alchemy which can set consumer mouths watering and help to rack up tangible sales results at the food store check-out counter—scores again in a new line of frozen ready-cooked products recently introduced by Holloway House, Inc., Chicago, a division of the Thompson restaurant firm.

Much of the sparkle and merchandising punch of the new packages can be attributed to their roto-gravure-printed, high-gloss overwraps, which utilize a new, harder, more sparkling type of wax-polyethylene coating. Also of interest from the convenience standpoint is the foil-laminated inner carton in which the products may be heated before serving, eliminating the need for a separate cooking utensil.

The four frozen products involved, which are merchandised under the Holloway House trademark,

include Beef Patties in Onion Sauce, Stuffed Green Peppers with Beef, Swiss Steaks with Gravy, and Macaroni with Cheese.

The key to appetite appeal is the strikingly realistic printed reproduction of top-notch color photography of the ready-to-eat product, which could hardly have been achieved with any conventional wax coating. And, of course, a wax coating was essential to protection of these products if an economical paper wrap was to be used. The results are

**So realistic** you can almost smell the tempting aroma is typical illustration on ready-to-eat Swiss steaks wrapper. New-type hard-gloss wax coating has fine printing quality, higher blocking point, much less rub-off.

COURTESY MARATHON CORP.

## HEAT • SERVE • ENJOY!

HOLLOWAY HOUSE PRODUCTS ARE CAREFULLY PREPARED AND PROCESSED TO MEET OUR HIGH STANDARDS OF QUALITY AND FLAVOR. WE UNCONDITIONALLY GUARANTEE SATISFACTION OR YOUR PURCHASE PRICE WILL BE REFUNDED IN FULL.

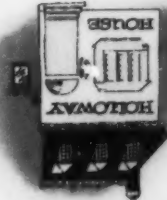
**KEEP FROZEN**

### IN OVEN



... REMOVE WAX PAPER WRAPPING. PLACE UNOPENED FROZEN PACKAGE IN PREHEATED 400° OVEN. HEAT THOROUGHLY. (ABOUT 40 MINUTES.) DISCOLORATION OF PACKAGE MAY RESULT FROM HEAT AND IN NO WAY AFFECTS THE PRODUCT.

- HOLLOWAY HOUSE STUFFED GREEN PEPPERS
- HOLLOWAY HOUSE MACARONI & CHEESE
- HOLLOWAY HOUSE BEEF PATTIES



FOR DELICIOUS, READY-COOKED MAIN DISHES, TRY

two swiss  
steaks with  
gravy  
HEAT • SERVE • ENJOY!



## frozen swiss steaks with gravy

INGREDIENTS: BEEF, WATER, TOMATOES, RICE FLOUR, BEEF FAT, ONIONS, SPICES, PEPPERS, CARAMEL, BEEF EXTRACT, SALT, MONOSODIUM GLUTAMATE, GARLIC, PEPPER, SALT, LEMON, AND CARAMEL COLORING.  
HOLLOWAY HOUSE, INC., CHICAGO, ILL.

NET WT. 10 OZ.



2 servings

two swiss steaks with  
gravy

two swiss  
steaks

**HOLLOWAY  
HOUSE**  
two swiss  
steaks with  
gravy  
**2 SERVINGS**

### ON STOVE



... REMOVE CONTENTS FROM PACKAGE AND PLACE FROZEN IN DOUBLE BOILER. HEAT THOROUGHLY. (ABOUT 40 MINUTES.) LESS TIME IS REQUIRED IF NOT SOLIDLY FROZEN.

HEAT • SERVE • ENJOY!

PRICE WILL BE REFUNDED IN FULL.  
SATISFACTION OR YOUR PURCHASE  
WE UNCONDITIONALLY GUARANTEE  
ARDS OF QUALITY AND FLAVOR.  
ESSED TO MEET OUR HIGH STAND-  
CAREFULLY PREPARED AND PROC-  
HOLLOWAY HOUSE PRODUCTS ARE

KEEP FROZEN

IN OVER



PRODUCT.  
AND IN NO WAY AFFECT THE  
PACKAGE MAY RESULT FROM HEAT  
OF MINUTES. DISCUSSION OF  
OVER HEAT INSUFFICIENTLY ABOUT  
PACKAGE IN PREHEATED 100°  
FINE PLACE WHEN THE THERM  
...REMOVE WAY PAPER WRAP-



- \* HOTTOMAY HONZE BEEF BATTIES
- \* HOTTOMAY HONZE WYCAKONI & CHEESE
- \* HOTTOMAY HONZE STUFFED GREEN BEBBERS

FOR DELICIOUS, READY-COOKED MAIN DISHES, TRY

# steaks frozen Swiss

HOLLANDAY HOUSE, INC., CHICAGO, ILL.

10 SEP 1979



MEAT • SERVE • ENJOY!  
steaks Gravy  
two ways

**HEAT**  
and  
**SERVE**  
Quick-  
Cooked  
Ready-

Services

two Swiss steaks

2 SERVINGS  
steaks with  
two Swiss  
HOUSE  
HOLLOWAY

ON STOVE



...REMOVE CONTENTS FROM  
PACKAGE AND PLACE BROWN IN  
DOUBLE BOILER. HEAT THOR-  
OUGHLY (ABOUT 40 MINUTES).  
LESS TIME IS REQUIRED IF NOT  
SOLIDLY FROZEN.



such as to suggest that a new level of sales is now available to any user of color-printed wax overwraps.

### Special polyethylene

The idea of blending polyethylene in a wax coating is of course not new to the paper industry; it is now practically standard for high-quality wraps. The secret of this new formula, which was worked out by the overwrap supplier, is the use of a special low-molecular type of polyethylene resin\*, which had not previously been used in this way.

The result, it is claimed, is an improvement in properties all along the line: extreme hardness, resistance to low-temperature cracking, better scuff resistance, excellent sealing strength, efficient wrapping characteristics, as well as the exceptional sheen and gloss.

The blocking point is as much as 20 deg. F. higher than for previous waxed wraps. Heat-sealing temperature for automatic wrapping operations runs at least 50 deg. higher. Surface friction is appreciably lower, which makes for easier sliding on wrapping machines and conveyors and in the loading of finished packages into shipping containers, with less impairment of the coating. There is less coating rub-off all along the line on machinery, fixtures and clothing.

Due to its hardness, the surface of the wrapper does not soil easily, despite the handling to which frozen-food packages are subjected in retail food stores.

Lengthy research and testing were required to perfect the converter's process by which the coating is blended and applied to the sulphite base sheet. It was necessary also to find special inks to give the best printing results.

Now that the problems have been solved, the use of low-molecular polyethylene in such a coating is significant, because its viscosity and other handling characteristics permit the converter to add more polymer to the wax. This is important since the proportion of polyethylene in any blend is limited by the capacity of existing coating equipment to handle the desired quantity of polyethylene. The new development makes it possible to get more out of existing equipment; it permits, in combination with wax and on conventional waxing machines, a coating approaching that produced by special polyethylene extrusion-coating machines.

In addition to the Holloway House line, new waxed carton overwraps incorporating this special coating are now being used for such products as

C. A. Swanson & Sons frozen pies, Georgia Golden Shore frozen shrimp, Agen frozen peas and lima beans, and others.

### Cook-in carton

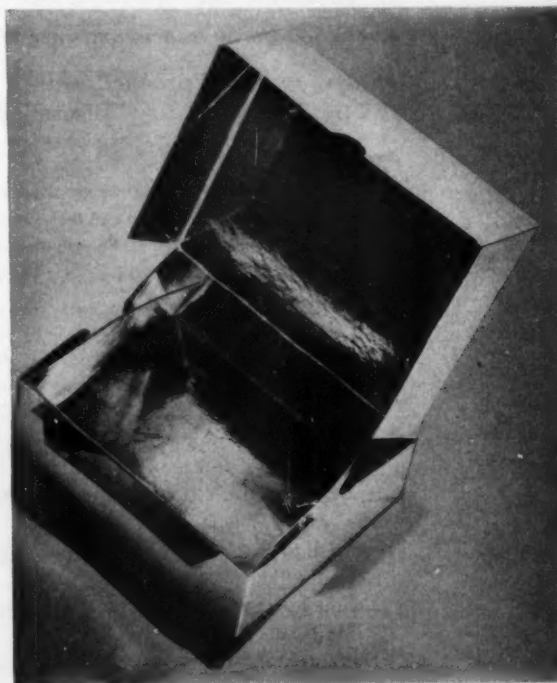
The one-piece-style, cook-in folding carton used in these packages makes a new level of function and economy for heat-and-eat products. It consists of a 0.014 pure solid bleached board body laminated to 0.00045 lacquered aluminum foil.

Supplied to the food producer folded, in knocked-down form, which occupies little storage space, the carton incorporates a roll scored bottom and is completely leakproof—a particularly important factor in connection with products which include gravy or other liquid ingredients. Set up manually, the carton incorporates a self-locking arrangement on the front flap.

With a carton of this type, foods may be placed in the oven right in the package for heating to serving temperature. The taste of the product is in no way affected by the packaging material, it is said.

In addition to their specialized package features, the new Holloway House products are significant [Continued on page 198]

**Foil-lined carton** used by Holloway House is not only ovenproof, but liquid-tight, due to special one-piece construction, so that products containing gravy or sauce can be heated in it.



\*"Low-molecular-weight polyethylene" refers to polyethylene whose average molecular weight runs close to 2,000. Low-molecular-weight polyethylene is less viscous than high-molecular-weight polyethylene. Its application in packaging is primarily as a modifier for wax used in coating papers used as wraps.

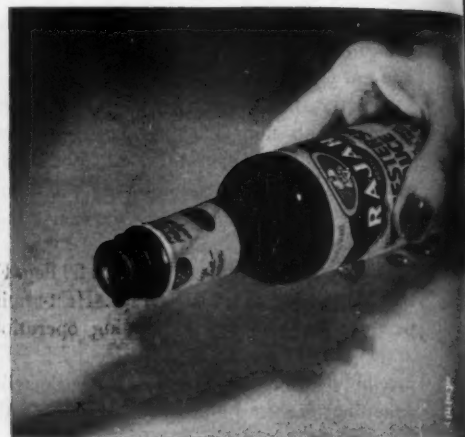
*Pour, shake or sift with*

## Polyethylene fitments



PHOTO COURTESY A. L. BYRNE CO.

**Pouring.** Polyethylene rings with non-drip design sharply cut down the flow of liquid and prevent it from dripping down to burn laboratory workers' hands. DuPont is currently using them on five-pint containers for C. P. reagents.



**Shaking.** Fitments dispense liquid in a steady stream or drop by drop, with quick cut-off, no spilling. A & P's Rajah Worcestershire Sauce is one of many products now using this device.

*Non-drip and easy-dispensing features  
of molded bottle attachments are attracting a growing list  
of users in varied product fields*

**T**he use of molded polyethylene attachments that permit contents of a bottle or can to be more readily poured, sifted or shaken has progressed in the last few months from a novelty status to a rapidly growing trend.

An increasing number of these convenience devices are being seen on packages for cooking sauces and seasonings, chemicals and wines.

Relatively low in cost and simple to insert mechanically, these fitments, apparently, can often provide the extra package refinement that wins wide acceptance for a product by consumer good will.

The more popular fitments roughly may be grouped into three categories:

1. Collar-like pouring rings to prevent dripping.
2. Small-aperture shake-out inserts.
3. Multi-hole sifter tops.

There are, of course, many other forms of poly-

ethylene used in bottles, caps, cap liners, spouts, stoppers, plugs, droppers. But the term "fitment" is usually applied only to devices molded from polyethylene and fitted into or around the bottle opening so that the contents of a container may be poured, shaken or sifted out more easily.

Polyethylene has three familiar properties that are ideal for this type of application. It is compatible with most foods. It has a smooth, wax-like surface that does not interfere with the closing and reclosing of the outside cap. And it has surface-tension characteristics which keep most liquids from adhering to it.

### **Non-drip pouring rings**

This surface tension of polyethylene has been a chief reason for its use in "non-drip" fitments designed to prevent excess liquid from dripping down

PHOTO COURTESY OWENS-ILLINOIS GLASS CO.



**Sifting.** Disk snaps over bottle end to spread granulated product evenly over a wide surface. Oldest, most widely used of polyethylene fitments, sifters aid items like Adolph's Meat Tenderizer.

the side of a bottle, either during or after pouring.

One of the first users of this type of fitment was Roma Wine Co., San Francisco.<sup>1</sup> Roma wine bottles are equipped with a polyethylene "collar" which fits snugly inside the neck of the bottle and has a sharp cut-off lip. This lip instantly stops the flow of liquid

<sup>1</sup>See "Dripless Wine," *MODERN PACKAGING*, Feb., 1954, p. 97.

PHOTO COURTESY OWENS-ILLINOIS GLASS CO.



**Unusual variation** is this two-way fitment used for R. T. French Co.'s Worcestershire Sauce. In horizontal position (top), slotted top dispenses sauce drop by drop; in vertical position, a stream pours out from bottle.



**Non-drip wine bottle** protects tablecloth. Roma Wine was first to use this fitment, here featured in Pio Wine's unusual container.



PHOTO COURTESY WHEELING STAMPING CO.

when the bottle is lifted up from pouring position. And, because of the low surface tension of the polyethylene, no drops cling to the lip—thus there are no drops to trickle down the outside to the table.

Roma's dripless fitment—a product of extensive research and development on the part of the company itself—has not yet been licensed to other packagers. However, its apparent success has spurred the development of similar devices by at least three large plastics molders. Although different in design, their fitments are aimed at the same goals: sharply cutting off the flow of a liquid after it is poured out of a bottle and preventing any excess drops from dripping down the sides afterwards.

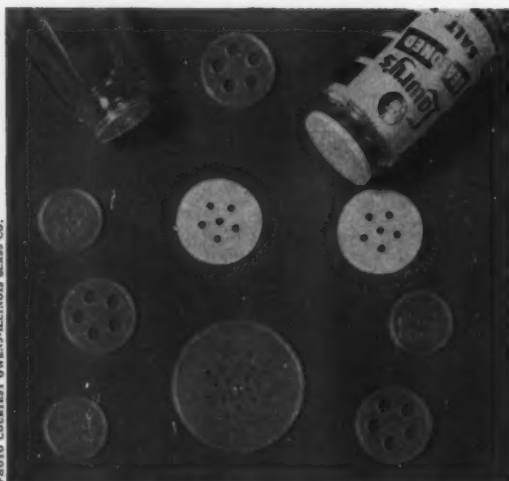
This type of fitment is being used by E. I. du Pont de Nemours' Grasselli Chemicals Department. Polyethylene inserts similar to those used by Roma, but with a much thicker lip, are now being applied to all five-pint containers of C. P. reagent chemicals to prevent the dripping of strong acids down the outside of bottles to burn the hands of laboratory workers.

Another company that has adopted a non-drip fitment is Bartolomeo Pio, Inc., Philadelphia, for wine bottles.

#### Shaker-type fitments

Spreading rapidly in a number of product fields is the shaker-type pour-out fitment, whose original

PHOTO COURTESY OWENS-ILLINOIS GLASS CO.



**Shaker tops** (top row) and non-drip rings come in natural as well as in colored plastic. Fitment illustrated at far right uses three shake-out apertures with baffles for better control of flow.

introduction actually pre-dates the collar-type ring. This fitment combines extra convenience for the consumer, together with easier filling for the packager.

A typical fitment of this kind is a solid cap of polyethylene, designed to fit over the top of a bottle. In the center of the cap is a slight depression, surrounding a tiny orifice which projects upward. By shaking the bottle with such a device, the user can expel the contents through the orifice, either in drops or in a fairly steady stream. After use, any excess liquid will slip off the edges of the opening and run down into the depression in the cap, where it may be wiped off. Although this type of fitment possibly does not offer as much non-drip protection as the internal-ring type, it usually prevents liquid from running down the sides of bottles.

This type of shaker top is particularly well suited to such products as vinegar, sauces, bitters, etc., which are dispensed in relatively small quantities at one time. The pour-out fitment both restricts the flow of the product and prevents afterdrip. Most of these attachments are made with a single small hole in the cap, although a three-hole fitment is also in use. Sometimes, a small baffle is built into the base of the pour opening to provide additional control of the product.

Shaker fitments are now being used by such companies as Chun King Sales, Inc., Duluth, Minn.; LaChoy Products Co., Archbold, Ohio, and Oriental Show You Co., Inc., Columbia City, Ind.—all for their soy sauces; by G. F. Heublein & Bro., Hart-

**Snap-on sifters**, such as that used on Lawry's Seasoned Salt, come in many diameters and hole sizes, in either natural or colored polyethylene.

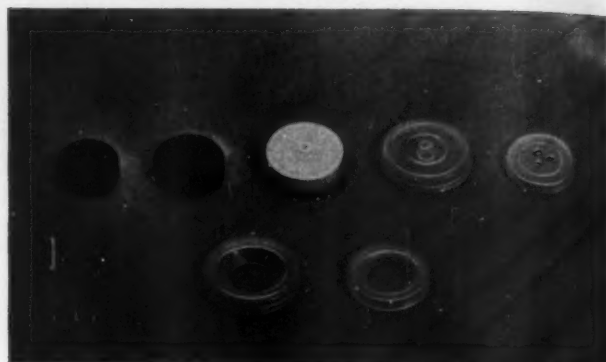


PHOTO COURTESY WHEELING STAMPING CO.

ford, Conn., for A-1 Sauce; by John H. Breck, Inc., Springfield, Mass., and Stephan Distributing Corp., Fort Lauderdale, Fla., for shampoos; by Angostura-Wuppermann Corp., New York, for Angostura bitters and by Crystal Pearl Products Co., Evansville, Ind., for vinegar. This is only a sampling of the growing list of users. One rather unusual use is by Boyle-Midway, Inc., New York, on its F-style metal can of Charcoal Lighter Fluid.

Somewhat different in principle is the fitment for

## Many famous brands now



A-1 Worcestershire Sauce



Stephan's Shampoo



use on Worcestershire sauce made by the R. T. French Co., Rochester, N. Y. It has a narrow slotted opening in the top, rather than a round hole, which serves a dual purpose. When the slot is in horizontal position, the sauce may be shaken out drop by drop; when it is held vertically the sauce pours out in a steady stream.

One of the reasons for the fast-increasing number of applications of shaker-top polyethylene fitments is their practical advantage to the packager. By using them, he can maintain larger filling-tube diameters for products of this type.

#### Sifter fitments

One of the oldest and most widely used types of polyethylene fitment is the shaker disk. Designed to snap over the top of a bottle holding a granulated or powdered item, the disk fits underneath a metal or plastic closure. Thus the product is protected, since the sifter's openings are covered when the container is not in use.

Sifter fitments have won acceptance in many fields and are available now in a wide range of diameters, hole sizes and colors. Seasonings, spices, cake toppings, monosodium glutamate, foot and baby powders, powdered bleach and many other products of a similar nature, which the user must sprinkle or sift over a fairly broad surface area, have adapted polyethylene sifter-top fitments.

Lawry's Products, Inc., Los Angeles, was one of the very first packagers to make use of this device, on bottles for Seasoning Salt. The extensive list of other users includes Adolph's Food Products, Baker's Extract Co., Davis Mfg. Co., Durkee Foods,

PHOTOS COURTESY OWENS-ILLINOIS GLASS CO.



**Promotional value** of using a polyethylene fitment is pointed up by this La Choy soy sauce bottle, which calls attention to its new convenient shaker top.

Albert Ehlers, Inc., International Minerals & Chemical Corp., Nu-Way Foods, Schilling & Co., Spice Islands Co., B. F. Trappey & Son and U. S. Vitamin Co.

All three types of polyethylene fitments—collar-type, non-drip pouring rings, shaker tops and sifters—are good examples of the trend on the part of packagers today to make their products easier to use. Most of them cost no more than a fraction of a cent per unit. Yet the returns in consumer good will may be quite impressive.

**Credits:** Non-drip pouring rings molded by American Molding Co., 355 Fremont St., San Francisco 5; A. L. Hyde Co., Grenloch, N. J.; Lumelite Corp., Pawling, N. Y.; Owens-Illinois Glass Co., Toledo 1, Ohio, and Wheeling Stamping Co., 2116 Water St., Wheeling, W. Va. Shaker and sifter fitments by Owens-Illinois Glass Co. and Wheeling Stamping Co.

## ow use polyethylene fitments

PHOTOS COURTESY OWENS-ILLINOIS GLASS CO.



Boyle-Midway Lighter Fluid



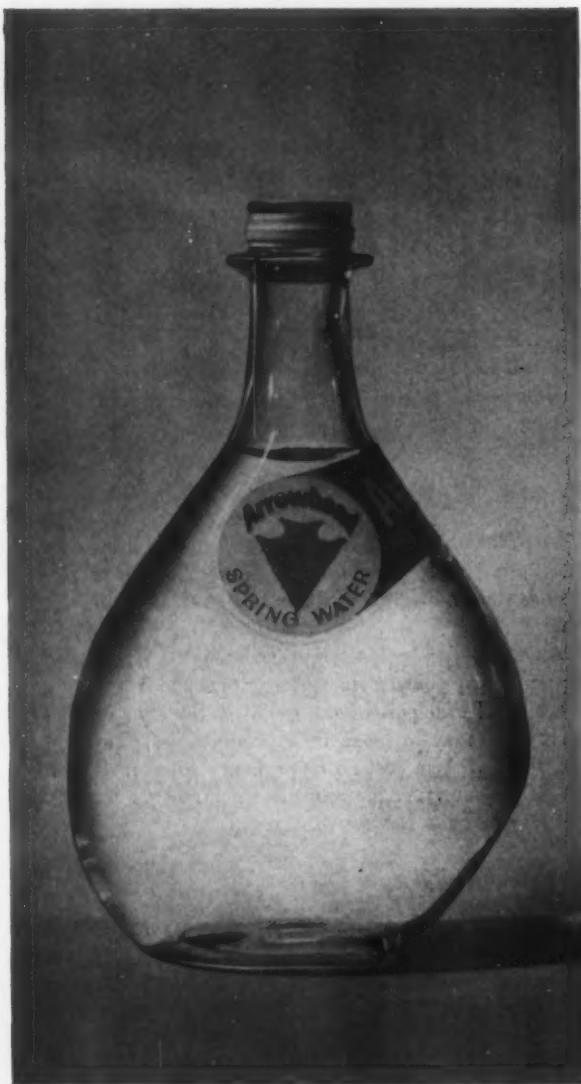
French's Onion Salt



McCormick's Cake Decors



Baker's Savor Salt



**Intriguing and functional** is shape of new half-gallon bottle, used for both Arrowhead spring water and Puritas distilled water. It can rest on either its end or its side, for easy pouring. But this alone did not insure its sales success.

**E**ven the best package needs a push. And this is particularly true when a company decides to venture into an entirely new sales field, where its product must be introduced to a whole new group of consumers.

Arrowhead & Puritas Waters, Inc., a long-established Los Angeles distributor of bottled water to homes and offices, was attracted, about two years ago, to the growing possibilities of selling drinking water in take-home-size containers through supermarkets in the Southern California area. Although a major competitor had been first in getting into this field, Arrowhead & Puritas felt that there was

## Cracking a market

*Arrowhead & Puritas' experience in putting bottled water into supermarket proves that something more than a prize-winning package design is needed*

plenty of room for another company—provided it could develop a package that would be appealingly different and provided it could put enough merchandising effort behind this package to attract customers' attention to it.

The package came first. Over a year ago the company adopted an unusual half-gallon "tilt" bottle which was immediately acclaimed for its excellence of design and has been widely publicized. It can be easily carried, easily stored in the home refrigerator and easily poured from. And it is attractive enough to be used on the table as a decanter. A unique lopped-off section on the bottom lets it rest on the table at an angle when nearly full, or to be lifted up by the neck for conventional pouring when the water level goes down.

The bottle, as a package, was impressive enough to win an award in the 1954 Package Designers' Council competition.\* But packaging prizes do not necessarily mean marketing success. Arrowhead & Puritas realized from the beginning that it had to find out exactly what its potential market was and how to sell that market. To help them do this job, they retained a management-consultant firm.†

### The water market

Much of Southern California was originally a desert. Water has always been scarce in many sections and, when available, of quite low quality. In

\*See "Designers' Best," *MODERN PACKAGING*, Feb., 1955, p. 126.  
†McKinsey & Co., Los Angeles.

the drier sections, a simple water dispenser which cools water by means of evaporation is practical for use in the home. So for more than 60 years thousands of Southern Californians have been having spring and distilled water delivered to their homes in 5-gal. bottles.

Arrowhead & Puritas Waters has been the largest company in this field since 1894, but about seven years ago its major competition hit upon a brand-new packaging and distribution idea: putting up water in half-gallon bottles and selling it in the supermarket.

The half gallon apparently was the size which the housewife found easiest to carry home and, even though it was priced at 20 cents plus deposit—considerably higher per gallon than Arrowhead's bulk product—it met with great success. By 1953 the competition had sewed up most of the grocery, drug and other store outlets.

For some time Arrowhead's management wrestled with the problem of joining battle in the supermarket. There were several questions to be answered first. Would this market for water continue to grow? Would it be profitable? Could merchandising plans be developed for a new half-gallon bottle that would win it a substantial share of the market?

The marketing consultants set about forecasting the potential bottled-water market in the Los Angeles area, investigating alternative ways of packaging water for store sales and figuring the break-even volume for half-gallon bottles. They came up with some interesting answers. First, they discovered that the potential market would not continue to

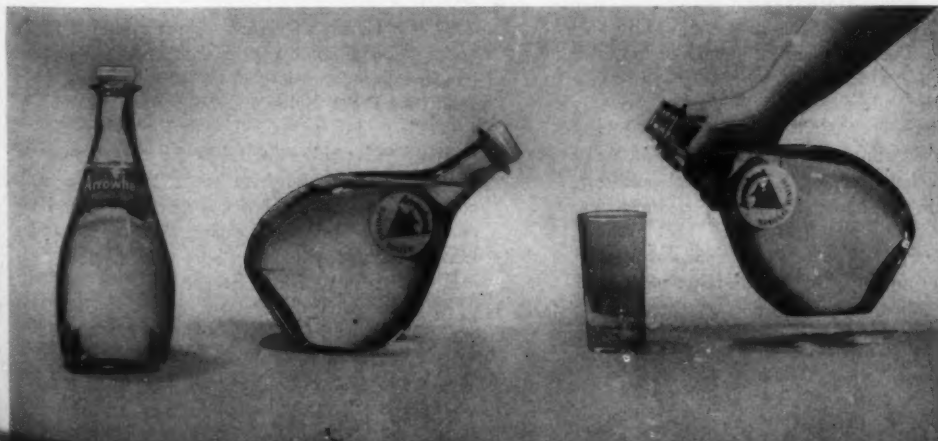


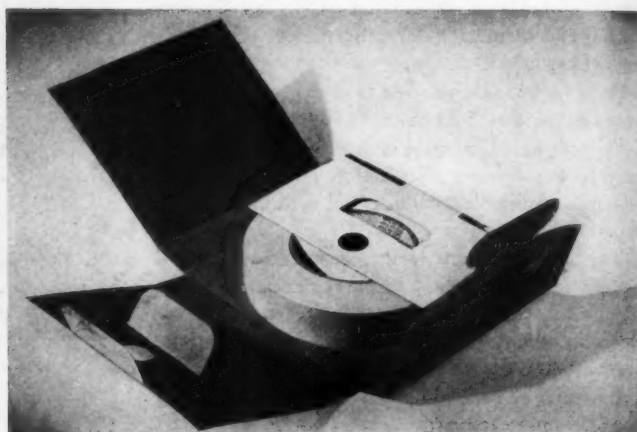
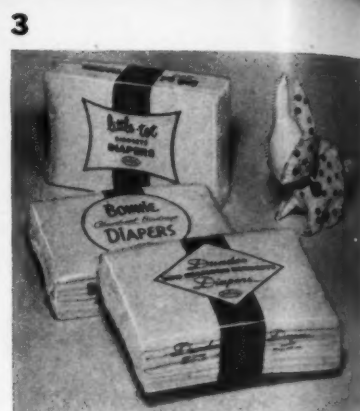
**Display rack** was a big factor in winning supermarket acceptance and the coupon deal drew attention. Note promotion of sales by the case. Product is now in 85% of the Los Angeles food chains and sales have exceeded estimates by 150%.

double every year as it had in the past, since most stores likely to carry bottled drinking water were already carrying it. However, some increase in the market seemed likely.

As far as packaging was concerned, research seemed to indicate that the returnable half-gallon bottle was the most practical container. Non-returnable bottles were too expensive, although stores preferred them to the bother of handling deposits [Continued on page 203]

**Convenience** is keynote of package design. Narrow side section facilitates storage in crowded refrigerator. Ease of pouring from tilt position encourages frequent use.





**Modern**

**Packaging**

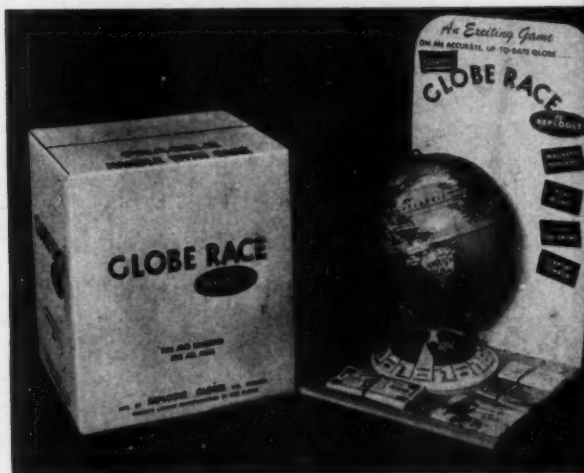
**Pageant**

- 1 A compact display carton for Cushman & Denison Mfg., Inc.'s L.E.B. Binder Clips gets this handy product right out on the counter to demonstrate the many uses and create impulse purchases. Design, Gilbert Snyder, New York. Cartons, S. Curtis & Son., Inc., Sandy Hook, Conn.
- 2 Pennsylvania Dutch design of this tumbler for C. H. Musselman Co.'s Apple Butter ties in with promotion of the product as "Made in the Pennsylvania Dutch Country." "ACL" tumblers, Hazel-Atlas Glass Co., Wheeling, W. Va. Lithographed metal closures, Anchor Hocking Glass Corp., Lancaster, Ohio. Labels, Piedmont Label Co., Bedford, Va.
- 3 Polyethylene film wraps for three brands of Dundee Mills diapers are supplied in roll form, perforated

at appropriate intervals for rapid, easy wrapping. No slip sheets are needed. "Perfo-Roll" polyethylene, Shellmar-Betner Flexible Packaging Div., Continental Can Co., New York.

- 4 Spinnerin Yarn Co.'s five-color "Sock Pak" serves both as a package for yarn to knit a pair of men's socks and as a home knitting box. Oval transparent windows permit a view of the yarn. Carton, Lord Baltimore Press, Baltimore, Md.
- 5 A simplified smaller-sized box for 60-yd. rolls of Behr-cat pressure-sensitive tapes includes a roll-centering and locking device which makes handling and re-storage faster and easier. Front edge carries identification copy in large, bold type. Carton, Federal Carton Corp., North Bergen, N. J.





nt Modern

Packaging

Pageant

- 6 To prevent scuffing of brass table legs, Central Tool & Product Corp. wraps the table in 3-ft.-wide lengths of 0.0015-in. polyethylene film, sealing ends with pressure-sensitive tape. Wrapper prevents corrugated fillers inside shipper from scraping lacquer that prevents brass from tarnishing. Polyethylene, Olin Film Div., New York.
- 7 Pressed glass tumblers re-usable in the home provide new sales appeal for Old Virginia Packing Co.'s line of jelly and preserves. Jelly comes in a 10-oz. size; preserves in a 12-oz. jar. Glass, Jeannette Glass-Brockway Glass Co., Inc., Brockway, Pa. Metal caps, White Cap Co., Chicago.
- 8 Blue Channel Corp.'s multi-unit container for Harris Crab Meat is ingeniously folded and notched

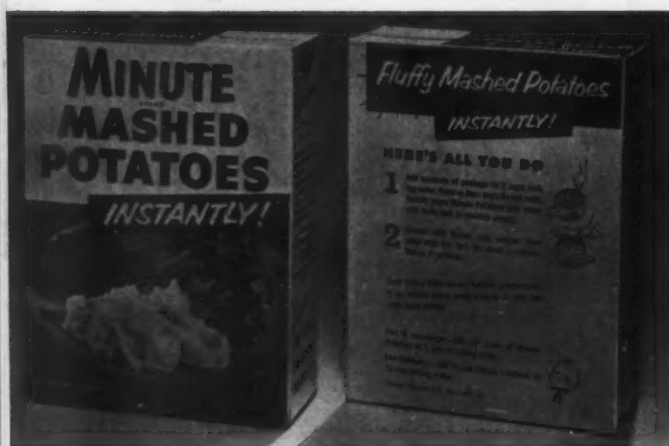
to suspend delicate crab shells in the upper part of the carton, with can of crab meat at the bottom—each visible through transparent windows. A foil label completes the package. Carton, Atlanta Paper Co., Atlanta, Ga.

- 9 Lenthalic achieves cosmetic appeal for its Tweed Perfumed Spray Hair Net in a glass aerosol container by use of a decorative transparent styrene cap and silk-screen printing. Bottle and cap, T. C. Wheaton Co., Millville, N. J. Aerosol valve and fittings, Precision Valve Corp., Yonkers, N. Y.
- 10 A colorfully printed, die-cut and scored insert card within a corrugated container protects and merchandises Replodge Globes, Inc.'s "Globe Race" geographical game. Base of globe fits in a circular

11



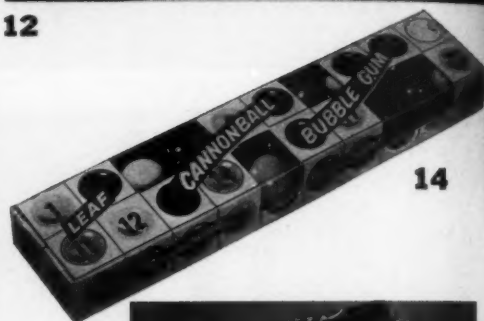
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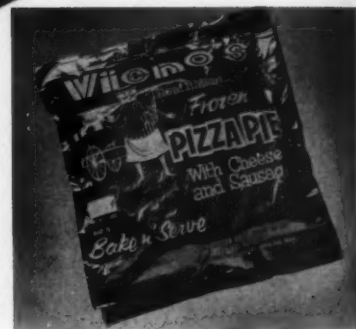
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14



15



Modern

Packaging

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die-cut opening; other elements are secured with elastic bands. Container, Stone Container Corp., Chicago.

- 11** Sales reportedly rose 10 to 20 times former volumes in markets where the new Orange Crush bottle was tested. The distinctive new 10-oz. bottle (right), adaptable to existing bottling and cleaning equipment, is a departure from the old 7-oz. size (left). Design, Jim Nash, New York.

- 12** Attractive four-color printed cellophane overwraps on square tray packages for William A. Higgins & Co.'s Holly, Mistletoe and Sun Glo nuts give the product the appearance of a confection to induce impulse sales. Wraps, The Dobeckmun Co., Cleveland, Ohio.

- 13** General Foods' new Minute Mashed Potatoes will soon be distributed in Central and Western states. Its full-color printed carton, containing four servings of shredded pre-cooked Idaho potatoes, is a natural shelf tie-in with GF's Minute Rice.

- 14** Leaf Brands, Inc.'s new 20-ball, take-home box of Cannonball Bubble Gum features numbers from one to 20 as part of the design. Six transparent cellophane windows reveal the multicolored gum balls, which blend in with the five-color-printed package motif. Design, Barry Nolan Studios, Chicago. Carton, Economy Folding Box Co., Chicago.

- 15** Kruger Frosted Foods' switch to these eye-appealing laminated aluminum foil bags for frozen Vieno Pizza Pies is reported to have reduced packaging

16



18



17



19



20

ant Modern

Packaging

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costs, helped get additional distribution and upped sales. "Mil-Seal" bags, Milprint, Inc., Milwaukee.

- 16** A new 10-lb. carton for Serv-U-Meat Co.'s Bar X Ground Beef Patties, designed for use with the company's new high-speed pattie machine, is made of solid bleached sulphate stock, five-color printed. Carton, Fibreboard Products, Inc., San Francisco.

- 17** "Southern Chef" barbecue sauce, product of Mar Kit Corp., now comes in a decanter-type glass container which has a wide mouth to make it easy to apply sauce with a brush. Glass, Hazel-Atlas Glass Co., Wheeling, W. Va. Lithographed metal screw cap, Armstrong Cork Co., Lancaster, Pa. DuPont Cel-O-Seal closure, sold through Armstrong Cork. Paper labels, A. Carlisle & Co., San Francisco.

- 18** Design of this British package for Beacon Artificial Snow vividly conveys product use. Cellophane bag depicts a realistic Christmas scene with the artificial snow visible through unprinted area of the film. Bag, British Cellophane Ltd., London, England.

- 19** A new oven cleaner, Ease-Ax, by Baldwin Products Co., is packaged in pint and half-pint glass jars with brush applicator wired onto metal screw cap. Closures, Crown Cork & Seal Co., Inc., Baltimore.

- 20** Re-usable polyethylene bag with draw strings for reclosing holds a dozen diapers made by Deering, Milliken & Co. Inside, a miniature polyethylene bag contains a pair of stainless steel diaper pins. Bags, Milprint, Inc., Milwaukee. Polyethylene, Visking Corp., Terre Haute, Ind.



**Golf bag** complete with handle is a specially constructed folding box with high display impact for a set of inflated plastic toy golf clubs.

# Dual-purpose

*Ideal's sales success has swung the entire industry to the idea that the package can be both a display setting and a useful part of the plaything*

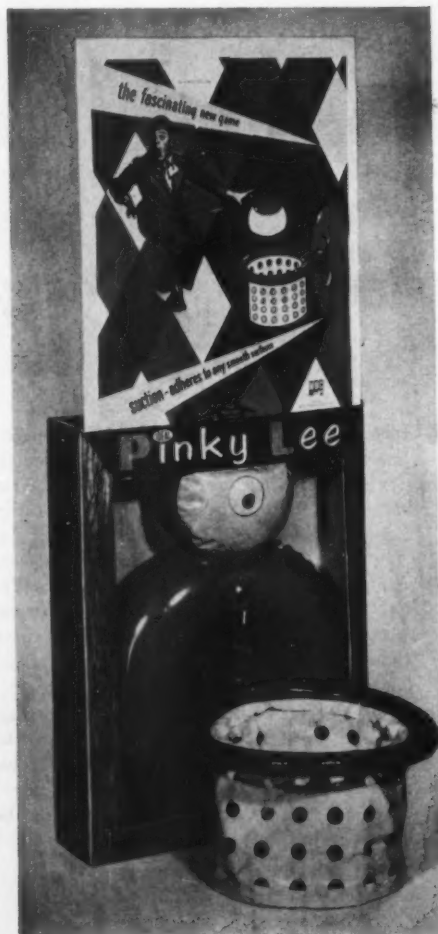
**T**here was a time when all that was demanded of a toy package was protection. A plain chipboard box often was sufficient.

Today a toy package requires all the imagination and ingenuity a skillful designer can give it to create the kind of display competition that now characterizes toy departments. And a major trend at present is the dual-purpose package that serves both as a container and as an integral part of the toy. The dual-purpose principle is applicable to many other fields of gift and novelty packaging.

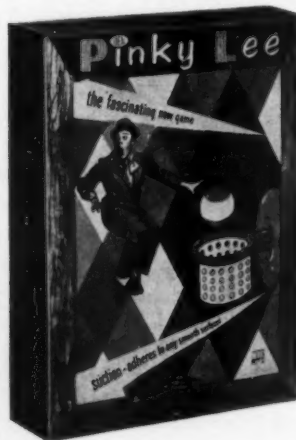
One of the reasons for the conspicuous success of the Ideal Toy Co., Hollis, N. Y., (annual sales about \$30 million) has been its attention to packaging that solves the retailer's display problems and also appeals to kids and parents alike.

This company spares no effort in developing:

1. Special constructions that transform each toy into a display simply by opening the package into



**Sliding cover** permits retailer to display this Pinky Lee basketball game without removing it from box. The basket pops forward when the slide is raised for display in the store.





# e toy packs

a fixed position without making a retailer waste time arranging a display.

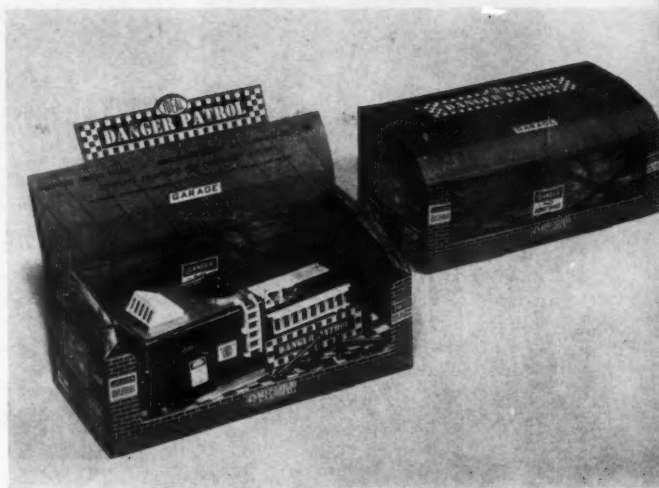
2. Color and art treatment to give a quick visual impression that attracts attention and immediately informs the shopper of the contents.

3. Clever re-use aspects that make the package a functional part of the plaything.

Descriptions of a few of the more than 250 current Ideal Toy packages illustrate how these objectives are accomplished.

A set of inflated plastic golf clubs, for instance, would have been an uninteresting item in an ordinary carton. But Ideal put it in a specially constructed folding carton that simulates a stitched leather golf bag complete with handle just like Daddy carries. A tie-up with the popular Pinky Lee TV program and an illustration of Pinky playing the game brings the package to life. Sides of the box are printed in gay green plaid, while the back panel carries illustrated directions in full color.

A Pinky Lee soft toy basketball game comes in a folding box with sliding cover that rides in a track. When the cover is lifted, the basket for the game pops out into effective display position, showing the shopper quickly what the game is for and how the basket may be affixed to a wall. The sliding cover  
[Continued on page 212]



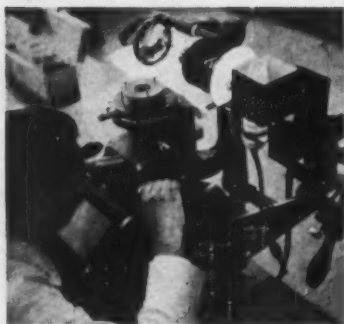
**Permanent 'garage'** is provided for Danger Patrol emergency truck with this sturdy fibre box, designed so that riser piece looks like the garage door when box is closed.

PHOTOS COURTESY ALAN BERGER



**Luggage-type** constructions have won favor for everything from dolls to play pools. Betsy Wetsy box has plastic luggage handle and metal lock. Third-dimensional cover with perspective illustration of home laundry is effective for counter display and pleases little girls with its clothes line on which to hang the doll's clothes. Hiawatha pool case is of folding box construction with paperboard carry handles.

# OWENS-ILLINOIS ASSURES YOU A



**Co-ordinated Research**

*Pure research* into formulae and fabrication of glass, *packaging research* into processing and handling methods in customer plants, and *market research* into consumer attitudes, add up to greater specific value for your packaging dollar.



**Engineered Design**

The package that takes your product to market must take *three* needs into account. Considerations of its function in the retail store, its operating efficiency and its consumer utility all become a part of the prescription for an Owens-Illinois package.



**The Right Container**

Versatility of facilities enables Owens-Illinois to supply containers to meet special needs: Duraglas containers for almost any item; Libbey Safedge packing tumblers or premiums; Kimble Ampuls and Vials; and a variety of Owens-Illinois plastic containers.

## A Good Package sells to



# COMPLETE PACKAGING APPROACH



**The Right Closure**

Know-how as to the best available liner and closure—best for packing, displaying, or using a specific product—may well be one of the most important single points through which expert packaging counsel will reward you many times over.



**Needed Fitments**

With emphasis on the word "needed," Owens-Illinois specialists are keenly aware of sales benefits possible through use of plastic shaker and pour-out fitments which are not "gadgets" but which increase consumer satisfaction with your product.



**Merchandising Cartons**

Modern cartons are developed only through systematic consideration of their opportunity to serve you in the retail store and retail warehouse as well as on your own filling line and in transit. Owens-Illinois is pioneering such developments.

sell to the very last spoonful



*Owens-Illinois  
engineered containers  
keep "instants" at peak  
of flavor and appeal*

INSTANT PRODUCTS have come of age . . . in flavor, quality, and popularity. And, to guard these important properties, producers are packaging more and more instant products in glass containers engineered by Owens-Illinois.

In Duraglas containers, your

product's freshness can be double-sealed—with a special peel-off safety seal and an airtight closure.

For convenience, wide mouth Duraglas containers make it easy to spoon out the right measurement. For neatness, glass jars won't let your product sift out on the pantry

shelf—won't drink up moisture from damp kitchen counters.

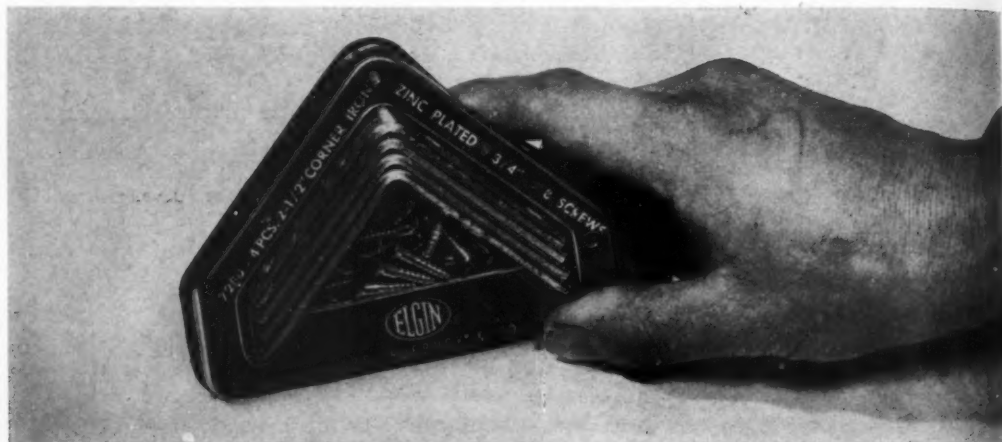
So for the complete glass packaging your product needs look to Owens-Illinois . . . the marketing-minded supplier of glass containers, cartons, fitments and quality closures in plastic and metal.

**DURAGLAS CONTAINERS**  
AN **Ⓢ** PRODUCT

**OWENS-ILLINOIS**  
GENERAL OFFICES • TOLEDO 1, OHIO

## All-plastic contoured halves

*Sears' newest vacuum-formed hardware package  
has a transparent top and colored, silk-screened base,  
both shaped to fit the product and parts*



**New concept** in vacuum-formed packaging is represented by Sears packages in which two halves complement each other, base recessed and lid domed, in shapes to fit contents. Both parts here are acetate sheet; base is colored red and silk screened in white, the printing perfectly protected when cover is slipped over and heat sealed to base.

In the field of formed sheet plastic packaging where ingenuity has had a field day in the last few months, Sears, Roebuck & Co.—one of the great pioneers in this medium—is currently exhibiting a few new wrinkles, with a coordinated group of packages for certain hardware items with several unique and practical features.

Sears has its own version of the all-plastic blister package\*, including an opaque, colored, silk-screen-printed base and a transparent top, both vacuum formed from sheets of extruded acetate to fit the product and its accessories, and heat sealed together.

The products involved, sold by Sears under the Elgin trademark, include such items as ornamental hinges, tee hinges, strap hinges, safety hasps, corner irons, mending plates and "no mortise" hinges. Including the various sizes and assortments covered, this particular packaging program currently embraces approximately 30 individual packages.

For some time Sears has been using "blister"-type packs for padlocks and various other items and

\*See "An All-Plastic Blister," MODERN PACKAGING, Dec., 1955, p. 98.



has had excellent success with them. These more-conventional packs consist of a transparent, form-fitting dome or blister whose bottom margin is sealed between the two halves of a folded paperboard base on which all necessary sales and informative copy is printed. The product itself is held in place on the card by means of the clear plastic cover.

For the new Elgin line of packages, however, Sears hardware merchandising officials wanted something different. Working in close cooperation with a plastic fabricator and the hardware supplier involved, they eventually came up with the present all-plastic package, which consists essentially of a red opaque base and a matching clear transparent cover, both produced from thin-gauge acetate sheet stock by the vacuum-forming process. It could also be made of butyrate sheet. On the red base, silk screened in white letters, are the Elgin trademark, product description, stock number, size and number of parts within the package. The transparent cover of the package, shaped to conform to the packaged items, extends down across the edge of the base, covering all but the small horizontal flange at the bottom of the base and protecting the printing against being soiled or defaced in handling.

In addition to the printing protection, this unusual construction gives the new Sears packages several other distinctive features. For example, that part of the transparent lid which covers the product is drawn only about half as deep as a conventional "blister" pack or "skin" pack would be for the same product, since the base section is formed with a matching depressed compartment in which the hinges, corner irons or other products are nested. As a result of this design treatment, even relatively heavy items are held securely against movement when the two halves of the package are "spot sealed" together by heat. Also, plenty of room is provided within the domed cavity for the necessary attachment screws.

The "stepped-down" design of the packages and the fact that two thicknesses of material are fused together when the parts are assembled and sealed also give the finished unit unusual strength and rigidity. Another desirable plus feature of the packages is the fact that the flat margins around the edge provide a handy place to grasp and pick up the package, as shown in an accompanying photograph.

The type of sealing makes the packages quite convenient to open. This is accomplished merely by inserting a fingernail beneath the base and transparent cover at any point around the bottom edge and tearing off the top sheet of plastic.

Close attention to design details—points which a buyer might appreciate without even being specifically aware of them—characterizes the new Sears



**Other shapes and forms** in the new Sears line. Fundamental is the principle of providing a compartment—in base or lid or both—to hold screws for use with item. Twelve such packages are now used—all differing in size and shape.

hardware packages. For example, all hardware items are arranged as compactly as possible within the package units, holding the size of the packages to a minimum and making them sufficiently compact to be carried conveniently. Elimination of all sharp corners in favor of smoothly rounded edges and contours permits the packages to be slipped easily into the pocket without fear of catching or tearing the lining and helps to prevent any fracturing of the transparent cover which might permit screws or other small parts to drop out.

The complete absence of paper, in the form of a base or card-type platform, in the new Elgin hardware packs does away with the problem of warping or curling often encountered in vacuum-formed packages of that type. The contoured plastic components are not adversely affected by high humidity or changes in climatic conditions. This facilitates the packaging operation itself and helps packages maintain their original appearance until sold.

Prior to adoption of the new all-plastic vacuum-formed packages, the Sears Elgin line of hardware items was packed in brown chipboard boxes with a printed label. Although these containers, symbolic of the "cracker-barrel" era of hardware packaging, did a satisfactory job of protecting the merchandise, they were completely devoid of merchandising appeal. In order to see the merchandise, the prospective buyer had to open the box and unwrap the items or have the clerk do it for him.

In the new packages, special attention has been given to tailoring the number of units within each

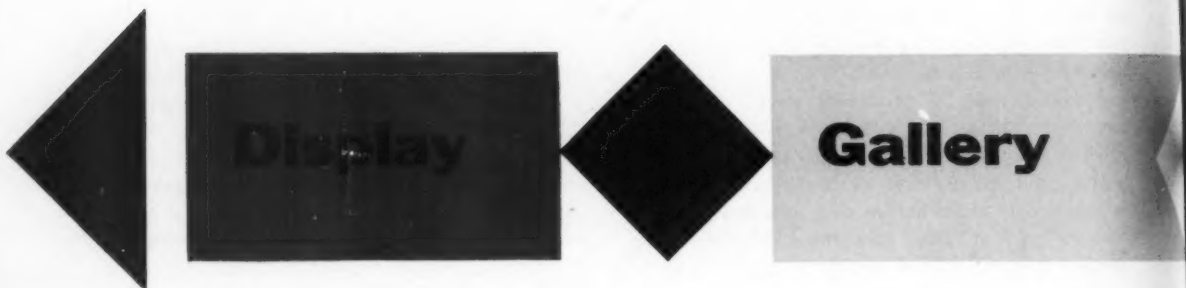
[Continued on page 203]

## Gravity-fed display card

Roger & Gallet's new counter card combines the features of an eye-catching point-of-purchase display and a convenient self-service dispenser. At first glance, it appears to be a conventional lithographed easel-type card, with a giant reproduction of a pair of lips calling attention to "Lip Ade," the brand name of the company's lip-conditioning product. Five smaller pairs of lips demonstrate chapped, dry, cracked and sunburned lips, fever blisters and cold sores—five of the conditions which the product is reported to remedy.

But, on closer inspection, the customer can discover that this isn't all. Three narrow transparent tubes running down the center card, formed of cellulose acetate, act as gravity-fed dispensers. Each tube holds four Lip-Ades in pink swivel-type metal cases. To purchase one of the packages, the shopper has only to remove the bottom case from any of the tubes and the remaining ones slide down into position.

**Credit:** Display by Robert Gair Co., Inc., 155 E. 44 St., New York 17.



## Magic drop in mid-air

An optical illusion has been created in this unusual mass display, to sell McCormick's vanilla extract and food colors along with such related items as cake mixes. Focus of attention in the set-up is a giant simulated drop, which, without too close inspection, appears to be suspended in mid-air beneath an inverted bottle of McCormick vanilla. Actually, the vanilla "drop" is made from lithographed paper, mounted on paperboard and fastened to a nearly invisible piece of netting against a black background. Continuing the "magic" idea, copy on either side of the vanilla drop tells customers to use "the magic spoonful" for home-made or ready-mix desserts. Beneath this is ample space for several rows of packages of McCormick food colors and a large bin designed to hold a jumble display of vanilla. The name "McCormick" is prominent on the face of the bin, which the store manager can flank with piles of cake-mix cartons.

**Credit:** Display by Einson-Freeman Co., Inc., Starr & Borden Aves., Long Island City 1, N. Y.



## Non-pilfer impulse rack

Bottles are completely visible yet less susceptible to pilferage in this compact new display offered liquor stores by Mr. Boston Distiller, Inc. It holds up to 16 doz. quarter-pint bottles (as illustrated) or 12 doz. half-pint bottles of Old Mr. Boston cordials and liqueurs. The bottles are lined up in rows on a plywood base, each row covered with a specially designed tray molded of polystyrene. Each bottle top is fitted into a slot in this, so that the bottles are held firmly in place. Bottles can only be removed from one end of the row, to discourage pilferage. The next tier of bottles is set on top of the polystyrene tray and chrome-plated steel divider posts hold the entire display in position.

The set-up is designed for both self-service and clerk-service selling, providing a billboard-like array of as many as 12 different types of product. A large rectangular head-piece at one end of the display carries price information.

**Credit:** Display designed and assembled by Bolta Products, Div. of The General Tire & Rubber Co., Lawrence, Mass.



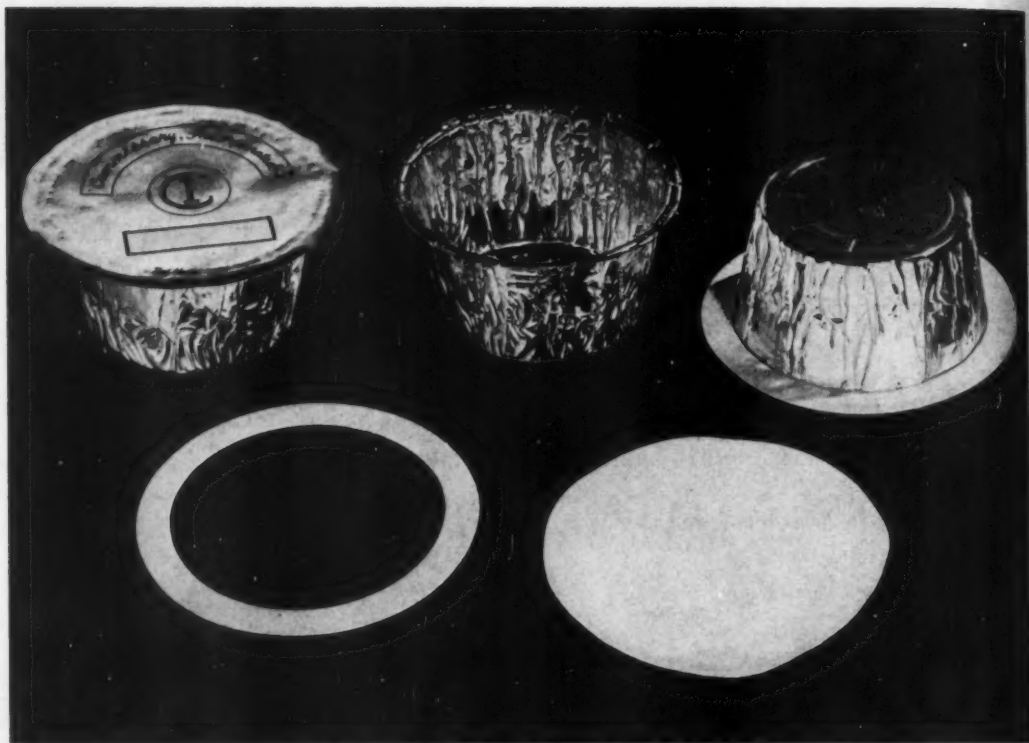
Display

Gallery

## Rubber bands cataloged

Products which all too often are tucked away out of sight in a stationery store, rubber bands come into their own with this new point-of-sale display introduced by The Alliance Rubber Co. for its Arco bands. The unit is a simple folding card with a die-cut aperture large enough to hold a single 1-lb. folding window carton of rubber bands, for use on store counters or in windows. Feature of the display piece is a catalog-like listing of 14 different varieties of the company's product, illustrated with actual-size drawings, divided into groups according to the width of the band. With this in front of him, a customer can order the size he wants from the clerk, the single box on display being left in place. Copy flanking the die-cut opening asks prospective customers, "How's your supply of rubber bands?" and goes on to point out that Arco offers a "size for every purpose." The company is offering the new display to stationers on request and one will be included with each shipment of 12 boxes of Arco's open-ring rubber bands that "just can't tangle."





**Package components** of deep-style, 8-oz. semi-rigid container consist of foil base, disk-type printed foil covers, sulphite paper ring coated on one side with polyethylene which permits heat sealing cover on package. Entire bottom surface of lid also is polyethylene coated.

## Packaged feeding

*Use of disposable aluminum foil containers,  
with a practical means of sealing, handling and reheating,  
has opened factory meal service to brand-name caterers*

**F**aced with the necessity of providing in-plant facilities for feeding their employees hot, nourishing meals, more and more industrial plants and offices are studying methods of meeting this problem without the installation of complete food-preparation equipment.

This offers a new opportunity for packaging. And two firms specializing in supplying hot foods to industrial plants—Commissary, Inc., Chicago, and Buddies' Catering Co., Milwaukee—now have in regular use a new type of semi-rigid aluminum

foil container that appears to be particularly well suited for the catering type of in-plant feeding operation and is equally adaptable to the sale of ready-prepared food products through automatic vending equipment.

In-plant feeding facilities for employees are particularly important when plants are located in out-of-the-way locations or in neighborhoods where regular commercial eating establishments are sub-standard or too small to handle the load. Night shifts and round-the-clock operations complicate



*Another Prestige Product*

*Packaged by* **BURT**



Dusting Powder Box  
manufactured for  
Dorothy Perkins Company  
115 No. Meramac Avenue  
Clayton, Missouri

F. N. Burt Company, Inc. • Manufacturers of Small Set-up Boxes, Folding Cartons and Transparent Containers • 500-540 Seneca Street, Buffalo 4, New York • Offices in Principal Cities. Or Write Direct • Canadian Division: Dominion Paper Box Co. Ltd., 469-483 King, St. W., Toronto, Canada



**Warm-up oven** on truck takes hot foods packaged in foil containers, supplied by catering firm, to any location in large industrial plant. Truck also carries vacuum container of hot coffee.

the situation. Then, too, management often finds that by making food available to employees within the plant, lunch periods may be made shorter without inconveniencing the workers or furthering the undesirable effects of "tavern" type lunches.

As pointed out recently,\* vending-machine installations represent one increasingly popular method of handling in-plant feeding. Several manufacturers of vending equipment are now supplying units capable of dispensing hot sandwiches, soups, etc., as well as hot or cold beverages, at the drop of a coin. The H. J. Heinz Co. recently introduced a new type of vending machine which dispenses a

\* See "Coin-in-the-Slot Selling," *MODERN PACKAGING*, May, 1955, p. 71.

**Filling and closing** of foil containers is done in kitchens of Buddies' Catering Co., Milwaukee. Soups and casserole dishes are ladled into non-absorbent packages, heat sealed on hand unit.



variety of canned soups and other canned prepared foods, warmed to 150 deg. for immediate eating.

Another system of in-plant feeding found desirable by many plants and offices involves the services of an outside catering firm or commissary which prepares the foods and brings them to the plant at fixed hours timed to coincide with luncheon schedules. Even if a plant is operating on a three-shift basis, deliveries may be arranged so that hot foods and beverages are available to employees at the proper time, relieving management of operating cafeteria facilities and keeping food preparation in the hands of concerns equipped for this specialized business.

In the past, one of the principal difficulties faced by such outside suppliers of prepared foods was the lack of a suitable package in which the foods could be carried into the plant and heated prior to serving. Heavy, re-usable containers which must be returned for washing are out of the question due to the cost angle. Paper containers may be used successfully for some types of products, such as salads, gelatine desserts, etc., but they tend to become soggy and do not lend themselves to heating the food directly in the package. What is needed are low-cost, lightweight containers which can be easily filled and closed, provide complete protection, permit heating of the food directly in the package and are easily disposable.

Commissary, Inc., which now has a volume of approximately 10 million meals per year, served directly in its clients' plants and offices, makes use of the new "deep" style, 8-oz. semi-rigid aluminum [Continued on page 133]





*How 4 different types of packaging  
made of BAKELITE Brand Plastics*

## Stimulate the urge to buy

Polyethylene squeeze bottles, molded of BAKELITE Polyethylene, blend outstanding eye-appeal and sales-impelling utility to scores of products, from cosmetics to pharmaceuticals, from household sprays to paints . . . as liquids or powders. Since it is inert to most chemicals, you are able to package a wide range of products in polyethylene. And, now there are molded tubes, and jars and cans as well . . . a great variety of proven sales builders.

*continued*



## stimulate the urge to buy

*continued from previous page*

### "big help in marketing natural fresh foods"

"Take our Natural Sliced Swiss Cheese," cites John B. McLaughlin, Director of Sales and Advertising, Kraft Foods Company, Chicago, Ill., "In its new polyethylene-cellophane laminate bag, the natural flavor is truly retained. The moisture and vapor-tightness of the package keeps pre-sliced cheese free from hardening. And the printed package makes a better display and is easier to handle for storekeeper and customer." Those are certainly advantages that stimulate the urge to buy, both by retailers and consumers!



2 Polyethylene laminate package for "Kraft" Cheese is supplied by Shellmar-Betner Flexible Packaging Division, Continental Can Co., Mt. Vernon, Ohio.



### flavor-fresh protection for frozen soups

BAKELITE Brand Vinyl Resins provide a coating on the interior and exterior of these "Nestyte" containers. It's uniform, tough and flexible . . . no cracking, flaking, peeling or chipping. No flavor contamination, no messy storage shelves, no extra clean-up time on packaging and dispensing. This container can even be washed and reused for food storage! And it permitted Seiler Foods, Inc., Boston, Mass., to "completely automate our packaging operation," according to Dana K. Seiler, president.

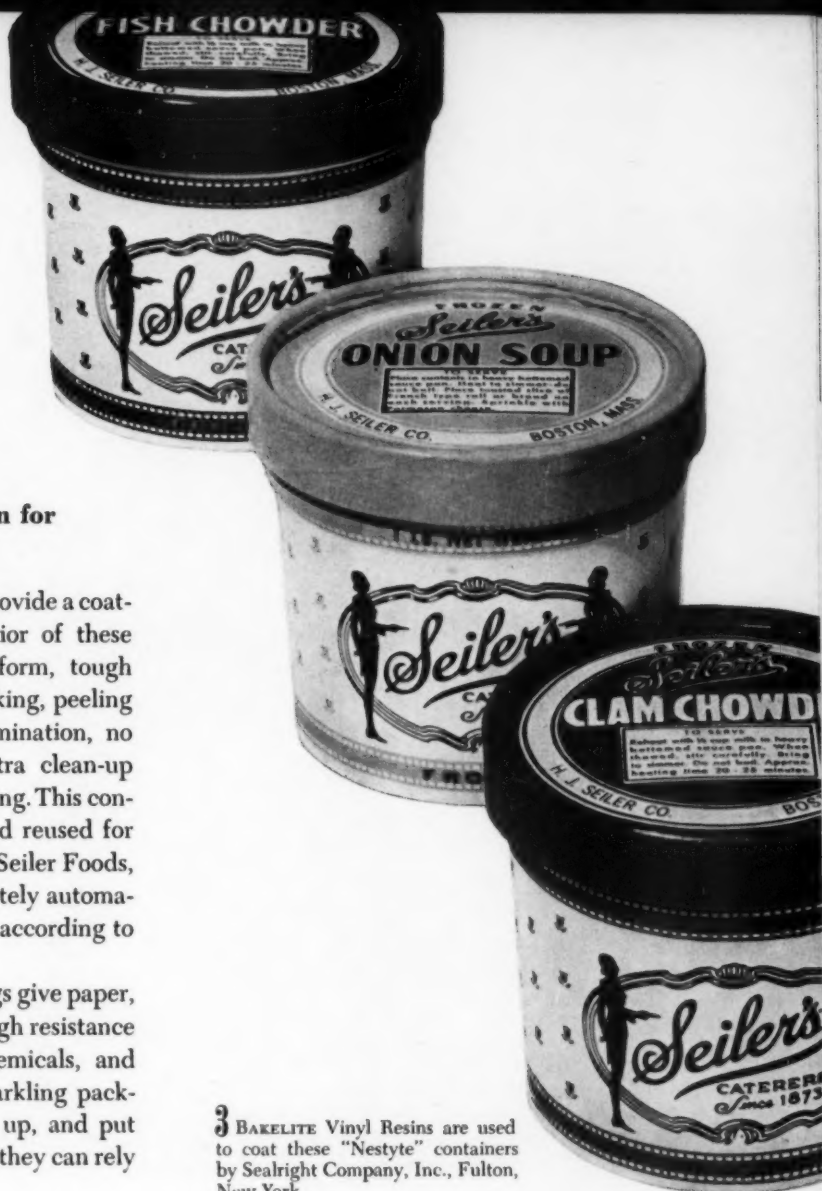
BAKELITE Vinyl Resin coatings give paper, cardboard, foil, and closures high resistance to water, fatty oils, food chemicals, and acids. They make a bright sparkling package that people look at, pick up, and put down their money for, because they can rely on the freshness inside.

3 BAKELITE Vinyl Resins are used to coat these "Nestyte" containers by Sealright Company, Inc., Fulton, New York.

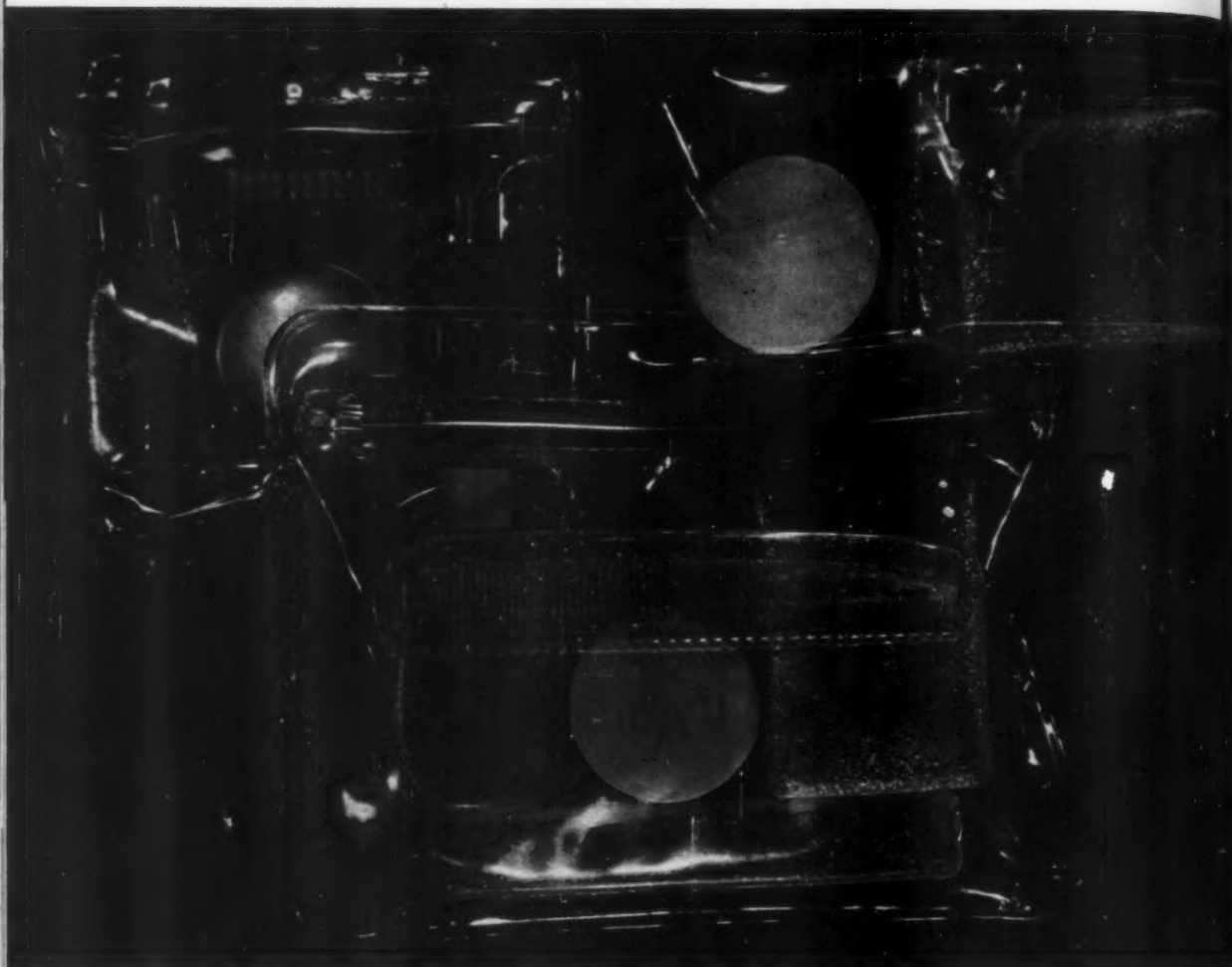
*Ask your packaging supplier about . . .*



*continued*



stimulate the urge to buy *continued from previous page*



4 Packaging based on KRENE Cast Vinyl Film for "Model" Traveling Kits by Henry A. Enrich & Co., New York, N. Y.

**sparkling looks, splendid protection,  
builds sales**

KRENE Cast Vinyl Film is the choice, indeed, for packaging with unsurpassed clarity, top heat-sealing qualities, and really dependable toughness, even in light weight film. It has a soft rich feel that says quality. Its tight seal, when desired, assures customers that no one else has touched the product. It invites buying "by telling the shopper," says Mike Marcus, sales manager, Henry A. Enrich & Co., New York, N. Y. "that we put the utmost care into making our products the best possible... sales stimulation of the finest sort."

Remember, there are many ways to stimulate buyers when you take advantage of packaging made of BAKELITE Brand Plastics and Resins. Write for a free copy of our "1956 Packaging Guide" to Dept. MV-105.

*First in the world  
of plastics...*



**BAKELITE COMPANY,** A Division of Union Carbide and Carbon Corporation UCC 30 East 42nd Street, New York 17, N. Y.  
The terms BAKELITE, KRENE, and the Trefoil Symbol are registered trade-marks of UCC.



**Semi-automatic sealer** is used by Commissary, Inc., Chicago. Three at a time, packages are placed in metal cavities on top of sealer turntable. Paper collar and polyethylene-coated foil cover heat seal to each other and to lip of container for liquid-tight closure as thermostatically controlled plunger descends, dwells for sealing interval and retracts. Knock-out mechanism raises containers for removal.



[Continued from page 128]

foil containers for hot soup and casserole-type meat dishes, as well as for various molded gelatin and salad products which require no heating.

According to Lou Regan, president of Commissary, Inc., the use of the new type of heat-sealed, rigid foil containers has opened up an entirely new field of operations for his company. The package has not only proved to be an outstanding sales factor for the company's meals, but also gives the customer definite assurance that the food has been carefully prepared and served. The containers, which insure complete portion control, are sufficiently rigid for trouble-free handling, permit heating directly in the package and cannot become soggy or limp because aluminum material is completely non-absorbent.

The body of the containers is formed from 0.0035 aluminum foil, made with a horizontal rim or flange at the top slightly more than  $\frac{1}{8}$  in. wide. Used in conjunction with this part of the package are a ring of pure bleached sulphite food-container stock, coated on one side with a thin film of polyethylene, and a cover, consisting of a  $4\frac{3}{8}$ -in.-diameter aluminum foil disk, printed in blue and white on the top surface and coated on the inner side with white polyethylene.

In sealing this package after filling, the paper-board ring is slipped over the bottom of the cup and brought up into position on the under side of the flange at the top. The cover is laid over the top of the container, and heat and pressure are simultaneously applied to the rim area by means of a hand-operated press or a semi-automatic unit which makes much faster production possible. When the press closes momentarily, the paper collar and the plastic-coated foil cover heat seal to each other around the edge and to the lip of the container, providing a liquid-tight closure.

Under the system followed by Commissary, Inc.,

foods are prepared one day, packed, chilled and sealed, then served in the plants the next day. Re-heating is performed in transit from a Commissary kitchen to the service point or, in some instances, within the customer's plant. This is accomplished by means of a Sterno-type portable heating unit in which the products are delivered to the plants. With these portable heating units, the packaged soups and casserole-style meat dishes may be brought to correct serving temperature within a few minutes and easily distributed to any desired plant or office areas.

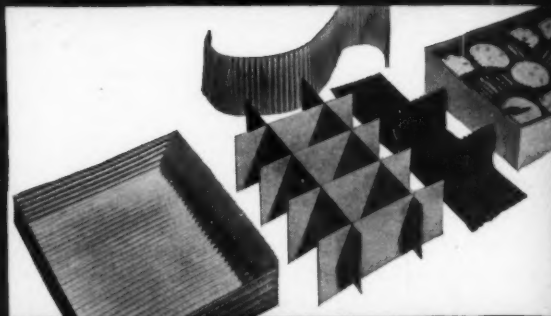
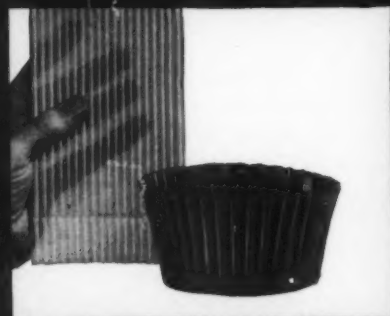
Opening of the containers is easily accomplished by puncturing the cover at the edge and stripping it completely off the base of the package. The product is eaten directly from the container. When empty, the foil package may be crushed and discarded, creating no special disposal problem in the plant or office.

At Buddies' Catering Co., the new rigid foil con-  
[Continued on page 200]

**Sterno heat cans** placed in bottom of delivery container warm the packaged foods. Products are packaged one day, kept refrigerated (but not frozen) and are delivered the following day.



*X-ray photograph of cookie package*



## GLASSINE PAPER

### *The Inside Story on Cookie Packaging*

The high shortening content in fresh, crisp cookies will seep through ordinary papers, resulting in a stained, unsightly package. However, fluted cups, corrugated pads and dividers made of glassine easily and economically solve this *inside* problem.

Shock protection for delicate baked goods is also provided. Dense, greaseproof Rhinelander glassine not only prevents staining, but rancidity as well. Its gloss and color give a rich gift-package look to the box.

Glassine is also used for cookie bags and outer wraps where its brilliance and fine printing qualities can be utilized. Rhinelander makes a wide variety of glassine and greaseproof papers for many types of protective packaging.

They are available in assorted colors and in waxed\*, laminated and coated grades for moisture-resistant packaging. Write for samples, stating your application.

\*Waxed and printed grades available through leading converters.

## RHINELANDER PAPER

Rhinelander Paper Company, Rhinelander, Wisconsin

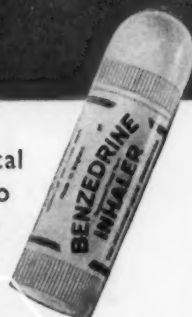




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*for quality containers*

Collapsible tubes, metal  
containers, closures to  
your exact specifica-  
tion—and made with  
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LIMITED

# FOIL



THOJAN Tools include wrenches, sockets and open end wrenches, meet the requirements of Tool and Die Manufacturers, Casting and Manufacturers, Folding and Case Die Makers, Gift Wrap Converters and Novelty Manufacturers. THOJAN Tools are characterized by their fine finish, long life, accuracy, uniformity and die-cutting quality. They are made from laminated paper or board, in rolls or sheets, ground or polished, and you will find a THOJAN grade that is best for your purpose.

## Calculating cushion requisites

*Three different methods of selecting and designing package cushioning materials.*

*By R. E. Jones and W. L. James\**

**T**he Forest Products Laboratory, in cooperation with the Engineer Research and Development Laboratories, Fort Belvoir, Va., has developed three simplified methods of selecting and designing the cushioning materials used to protect packaged articles from shock. The principles on which these methods are based were derived by the Laboratory in cooperation with the Packaging Section (WCRT-5), Wright Air Development Center, Wright Patterson Air Force Base, Ohio (4).<sup>1</sup>

Previous reports written by the Laboratory and others contain information pertinent to this project, in which case specific reference is made to those reports. Other reports (2, 5, 6, 7) are referenced merely for background information.

A method of designing a specific cushion for a given article was previously reported (4), but the problem of selecting a cushion with the proper physical characteristics was not treated in detail. In addition to providing simplified methods of calculating cushion thickness, this report provides criteria for selecting a cushion of proper stiffness.

### Design considerations

In order to design a package rationally to protect a given article from shock during handling and shipping operations, a level of performance in rough handling for the container, criteria of fragility for the article and the energy-absorbing capacity of cushions must be established.

The determination of the hazards encountered by a package during handling operations is, in the final

analysis, a statistical problem. If the statistical distribution of forces encountered in handling operations is known, the package can be designed for the successful transport of any desired percentage of the total shipment. When packaging for commercial shipment, it might be economically feasible to permit damage to a limited percentage of the goods shipped; whereas, for strategic military materials, it would be necessary to design for nearly 100% successful shipment.

In an analysis of performance, such factors as height of drop, type of surface, probability of a flat drop and orientation of container at impact (edge,

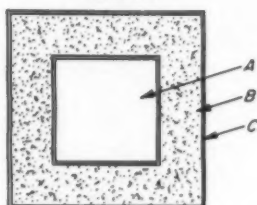
**1. Demonstrating** comparative resilience of cushioning materials. Load is pictured at top of its rise as it rebounds from the cushion.



\*Physicists, Forest Products Laboratory, U. S. Department of Agriculture, Madison, Wis. The Forest Products Laboratory is maintained in cooperation with the University of Wisconsin.

<sup>1</sup>Numbers in parentheses identify References appended.

FIG. 2



**A cushioned pack** consists essentially of *A*, an article; *B*, a cushion; *C*, an outer container.

corner or flat drop) might be considered. Since information is not available on all these factors, height of drop is used herein as a basis for specifying the level of performance in handling operations. A 30-in. drop is usually used because of its relation to the height of a man's hands from the floor when the man is standing, but the methods used herein may be applied to any height of drop.

As is the case with criteria for rough handling, numerous factors could be used to establish criteria of fragility. Variation in materials and the fatiguing effect of a series of equal or unequal shocks could again lead to a statistical approach to the problem. The effect of a certain type of shock on an article could be determined by analyzing the complete acceleration-time curve of the shock. Such an analysis, however, would be prohibitively expensive and time consuming for many applications.

To simplify this problem, the article is assumed to be rigid and only the peak acceleration is used in this report as a criterion of fragility. It is obvious that this quantity alone is not completely sufficient. For example, an article given a constant acceleration in a centrifuge could not be damaged by collision, such as could occur in electronic equipment where a shock-mounted tube tipped far enough during shock to strike an object, such as a transformer. Thus, the fragility must vary with the pulse shape; that is, with the rate at which the acceleration is applied. This would lead to the problem of selecting the pulse shapes for which an article must be tested. A practical solution to this problem suggested by Masel (8) consists essentially of determining fragility by dropping an article on various cushions until damage occurs. The advantage here is that the article is tested under a situation similar to actual packaging conditions and the pulse shape need not be considered unless the fragility expressed by the maximum acceleration varies sharply as a function of pulse shape.

While the use of maximum acceleration as a criterion for fragility is an oversimplification, it is thought that its use does lead to improved design. It also provides a simple basis for comparison of

cushioning materials as to their effectiveness in limiting peak acceleration.

Another reason for selecting maximum acceleration is that it can be related to the maximum force for a rigid body through Newton's second law of motion. Thus, it is convenient to use the quantity, maximum *g*-value, so that

$$G_m = \frac{a_m}{g} \quad [1]$$

where  $a_m$  is the maximum acceleration an article can withstand without damage in feet per second per second,  $g$  is acceleration due to gravity, 32.2 ft. per second per second and  $G_m$  is the maximum *g*-value, which is dimensionless. When using  $G_m$ , Newton's law becomes

$$F_m = W G_m \quad [2]$$

where  $W$  is the weight in pounds and  $F_m$  is the maximum force in pounds. Therefore, a rigid article having a maximum *g*-value of 50 and weighing 2 lbs. could sustain without damage forces up to 100 lbs.

If the maximum force an article can sustain dynamically without damage is known, that quantity can be used just as effectively as maximum *g*-value or acceleration. Acceleration is used here since the quantities displacement, velocity and acceleration have been generally used in shock and vibration

#### Key to equations

- $A$  = area in square inches.
- $a$  = acceleration in feet per second per second.
- $C$  = cushion factor, which is dimensionless.
- $E$  = energy in inch-pounds.
- $e$  = energy per unit volume in inch-pounds per cubic inch.
- $F$  = force in pounds.
- $f$  = stress in pounds per square inch.
- $G$  = *g*-value, which is dimensionless.
- $g$  = acceleration due to gravity, which is 32.2 ft. per second per second.
- $h$  = height of drop in inches.
- $m$  = mass in slugs.
- $S$  = displacement in inches.
- $s$  = strain in inch per inch, which is dimensionless.
- $T$  = measured cushion thickness in inches.
- $W$  = weight in pounds.
- Subscripts—
- $m$  = maximum value for a given problem. Other subscripts are defined in the particular section in which they are used.



**Table 1: Cushioning materials**

Material	Description	Density based on dry weight	Thickness of samples tested	Moisture con- tent at 75° F., 64% relative humidity
		Lb. per cu. ft.	In.	%
1	Curled cattle hair bonded with natural latex or neoprene rubber	1.17	1.53	10.1
2	..... do. ....	1.56	1.43	8.7
3	..... do. ....	2.62	1.35	7.3
4	Glass fibres bonded together with a resin	.80	1.30	1.4
5	..... do. ....	3.20	1.00	3.6
6	..... do. ....	5.00	1.00	2.6
7	Reclaimed sponge rubber; ground and bonded together	7.70	1.06	Less than 1
8	..... do. ....	12.00	1.11	Less than 1
9	Festooned sheet of curled cattle hair bonded with latex into a 1-in.-thick pad (one ply)	1.94	.91	10.9

studies. The use of g-value and acceleration also emphasizes the dynamic characteristics of the problem.

A cushioned pack, as shown in Fig 2, consists essentially of (a) an article, often placed in a chip-board or fibreboard container; (b) a cushioning material and (c) an outer container. In order to analyze a cushioned pack with simple physical laws, it is necessary to use an idealized mechanical system representing a package during a drop, as shown in Fig. 3. In this system, the following assumptions have been made: The article, assumed to be rigid and of uniform density, is represented by the weight,  $W$ ; the cushion, assumed to be massless, is represented by a spring; the outer container and floor are assumed to be rigid; the outer container is assumed to strike the floor flat so that no rotation of the article or container occurs.

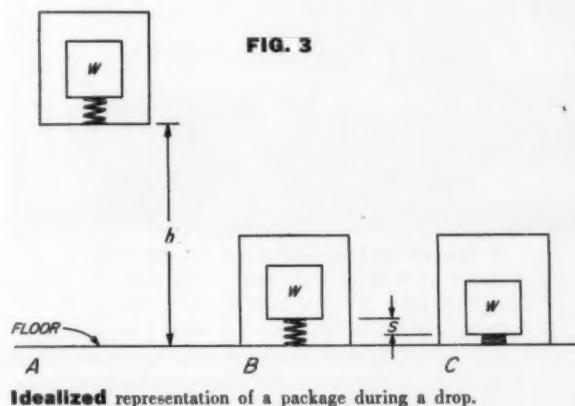
When a cushioned pack is dropped from a height,  $h$ , (Fig. 3, A) it receives a constant acceleration of  $lg$  until the instant the container strikes the floor (Fig. 3, B). At this instant, the container stops and the article continues to fall a distance,  $S$ , as shown in Fig. 3, C. The acceleration (negative) or force experienced by the article will depend on how quickly it is stopped. In general, the acceleration will be much greater than  $lg$ . At the maximum displace-

ment, the velocity of the article will be zero. If the force-displacement curve is monotonic, as it often is, the maximum acceleration or force will also be encountered at the maximum displacement.

The energy absorbed or stored by the cushion is equal to the area under the force-displacement curve for that cushion. Force-displacement curves are obtained by recording force and displacement on a universal testing machine (Fig. 4.) as the thickness of the cushion is decreased. The change of thickness of the cushion is the displacement. Thus, when the outer container stops, the force on the packaged article increases until there is sufficient area under the force-displacement curve to equal the potential energy possessed by the article prior to drop.

The force-displacement curves of three types of cushions are shown in Fig. 5. Few cushions are known to possess the characteristics of an ideal cushion (Fig. 5, A) and when they do, they often have undesirable recovery characteristics. An example of this type is plastic foam cushioning. Although no real cushion shows a discontinuity at zero displacement, cushions that approach discontinuity, as shown by the dashed line, can be considered ideal. A steel spring is an example of a linear cushion (Fig. 5, B). Anomalous cushions (Fig. 5, C) are designed with the aid of graphical analysis because their force-displacement curve cannot be reasonably represented by mathematical equations. Many anomalous cushions are called tangent because their force-displacement curve resembles the trigonometric tangent function. In fact, an extensive cushioning analysis of tangent functions has been made by Mindlin (9). Except for certain approximations, however, the graphical analysis associated with anomalous elasticity will be used as a basis for all cushion design in this report.

For some purposes the data are left as force-



displacement curves, but it is often more convenient to divide the force by the area of the cushion to obtain stress, thus:

$$f = \frac{F}{A} \quad [3]$$

where  $F$  is the force in pounds,  $A$  is the area in square inches and  $f$  is the stress in pounds per square inch; and to divide the displacement by the cushion thickness to obtain strain, thus:

$$s = \frac{S}{T} \quad [4]$$

where  $S$  is the displacement in inches,  $T$  is the measured thickness of cushion in inches and  $s$  is the strain in inch per inch, which is dimensionless.

The use of stress-strain curves has several distinct advantages over stress-displacement or force-displacement curves when they are applied to cushions whose area and thickness can be changed. For example, by changing the bearing area of a cushion that is too stiff or too soft for a given problem, the cushion can be used more efficiently. Another advantage is that the stress-strain curve is independent of the actual area and thickness of cushion tested to obtain the force-displacement data. Thus, only one curve is required to describe the energy-absorbing properties of the cushion, which results in greatly simplified design curves.

The stress-strain curves of the materials used to illustrate the proposed methods of design in this report are shown in Fig. 7 and the materials are described in Table I. The strain axis is shown up to values of one, since that is the maximum value

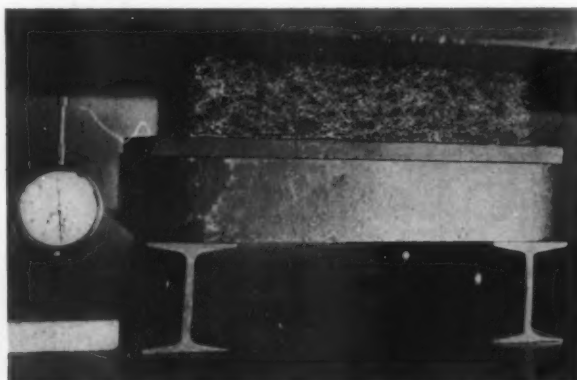
of strain that could result from displacement of a cushion.

The procedure for obtaining the force-displacement data from which the stress-strain curves are obtained is important because most cushions are not perfectly resilient and do not fully recover their initial height after displacement. The procedure used to obtain the data from which the curves in Fig. 7 were obtained is given in the reference (4). The curves all represent the initial displacement of the respective cushions. Although a procedure for repeated displacement is also given in reference (4), very little data have been obtained with it. A different procedure for obtaining static force-displacement data now being developed by ASTM Committee D-10, Subcommittee VI, appears to have a good possibility of wide acceptance.

It should also be emphasized that the data on which the curves in Fig. 7 were based were obtained from static force-displacement tests. It appears quite possible that data resulting from dynamic tests, for at least some materials, may be different from data resulting from static tests. It is expected, however, that the methods presented in this report can be used for dynamic data when they are available and it also appears that design based on static rather than dynamic data will be conservative. Other factors that affect the force-displacement data of various cushions, such as temperature and humidity, have not been carefully examined.

In discussing the choice of proper cushioning, the relative ease with which cushions can be displaced is often referred to qualitatively as softness, while the difficulty of displacement is referred to as stiffness. These quantities are defined more exactly as the slope of the force-displacement curve (often called spring rate) or as the slope of the stress-strain curve (often called modulus of elasticity). For a series of stress-strain curves of similar shape, the cushion with the higher slope at a given strain is called the stiffer cushion.

The simplicity of cushion calculations depends in part on the extent to which the stress-strain curves of the cushions are similar or are members of a family of curves and in part on the uncertainty that can be tolerated in the cushion calculations. This



**4. Force-displacement** tests of cushion materials are made on a universal testing machine.

**Curves** showing force displacements of three different types of cushions: *A*, ideal cushioning; *B*, linear cushioning, and *C*, anomalous.

**FIG. 5**



will be illustrated by means of sample calculations involving the following:

1. An exact method of selecting and designing package cushioning.
2. A simplified method of selecting and designing package cushioning when an uncertainty of  $\pm 10\%$  can be tolerated in the level of protection provided for the packaged article.
3. Several equations for quick estimations of cushion thickness.

#### Exact cushion design

The thickness of cushion required to protect a given article from damage caused by a drop of specific height is directly proportional to a ratio of  $h$  to  $G_m$ . Thus,

$$T = \frac{C h}{G_m} \quad [5]^2$$

where  $C$  is the cushion factor, which is dimensionless.<sup>3</sup> As described earlier, it is assumed that the equation applies only to flat drops and it is valid only for cushions whose thickness is approximately one-fifth the height of drop or less. For example, if  $h$  is 30 in., then equation [5] holds for thicknesses up to 6 in.

Since the cushion factor varies as a function of stress for a given cushion, the maximum stress must be known. This is obtained by combining equations [2] and [3] to obtain,

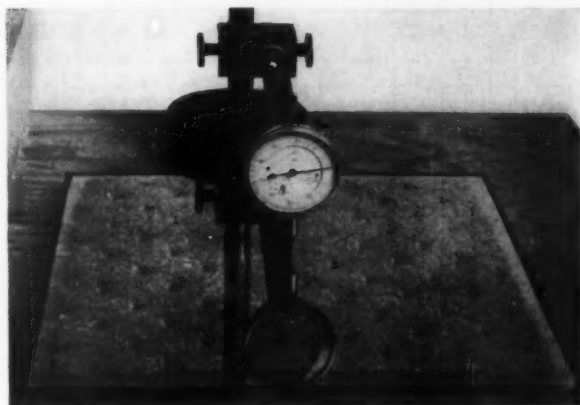
$$f_m = \frac{W G_m}{A} \quad [6]$$

where  $f_m$  is the maximum stress in pounds per square inch.

Equations [5] and [6] are related to each other by cushion factor-stress curves. These curves are obtained from stress-strain curves as follows:

The area under the stress-strain curve up to several values of strain is obtained with a planimeter or by counting squares. From the area under the curve, the energy per unit volume is obtained by a suitable conversion factor. Then, knowing the stress corresponding to the energy per unit volume at each value of strain, the ratio of stress to energy per unit volume can be obtained. The cushion factor-stress curves for nine materials are shown in Fig. 8.

Note that a wide range of cushion stiffness is presented. The difference in stress for a soft cushion, such as material No. 4, and a relatively stiff cushion,



6. Jig used to measure the thickness of a specimen.

such as material No. 6, may vary by a factor of at least 1,000. With equations [5] and [6] and with cushion factor-stress curves for a series of materials, it is possible to select and design package cushioning. Cushion design by this method is as precise as graphical analysis will permit, assuming that the cushion factor-stress curves and the assumptions made in deriving the formulae are valid.

To illustrate the use of equations [5] and [6] in connection with cushion factor-stress curves, assume that weight  $W$  is 3 lbs., area  $A$  is 20 in.<sup>2</sup>, maximum  $g$ -value  $G_m$  is 40 and height of drop is 30 in., then from equation [6]

$$f_m = \frac{W G_m}{A} = \frac{6 \text{ lb.}}{\text{in.}^2}$$

From Fig. 8, it is evident that at a stress of 6 lbs. per square inch, material No. 5 has the smallest cushion factor; therefore, the least thickness will be required with this material. The required thickness of material No. 5 may be calculated with equation [5] as follows:

$$T = \frac{C h}{G_m} = \frac{4.7 \times 30 \text{ in.}}{40} = 3.5 \text{ in.}$$

If material No. 8 were substituted for No. 5, the resulting thickness would be

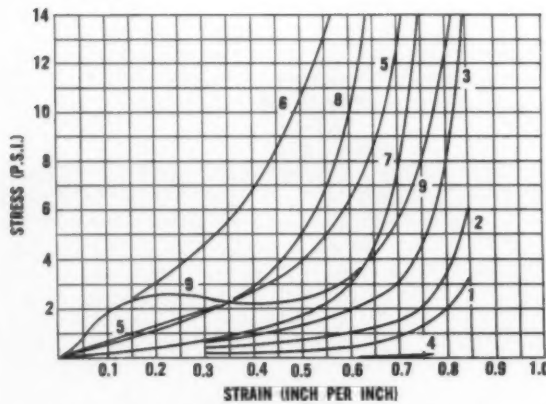
$$T = \frac{C h}{G_m} = \frac{5.5 \times 30 \text{ in.}}{40} = 4.1 \text{ in.}$$

A thickness of 4.5 in. would be needed with material No. 3, which is too soft, and 4.3 in. would be needed with material No. 6, which is too firm. These thicknesses are based on a maximum stress of 6 lbs. per square inch. However, if the bearing area were changed so that maximum stress corresponded to minimum cushion factor (3), the thickness requirements of materials No. 3 and No. 6 could be reduced. The minimum cushion factor for material

<sup>2</sup>The derivation of this equation is presented in the Forest Products Laboratory Report No. 2031, "Simplified Method of Selecting and Designing Package Cushioning Materials."

<sup>3</sup>The use of the phrase "cushion factor" has been suggested by Slaughter (13). However, the quantity defined as "cushion factor" by Slaughter is the reciprocal of the cushion factor used in this report. The cushion factor used in this report is the same as the "J<sub>c</sub>" used by Janssen (3) and the same as the "ratio of force to energy" used by Orensteen (10, 11, 12).

FIG. 7



Stress-strain curves for the nine different materials analyzed in this article.

No. 3 occurs at a stress of 2.5 lbs. per square inch. With equation [6], the bearing area would have to be changed from 20 to 48 sq. in., as follows:

$$A = \frac{W G_m}{f_m} = \frac{3 \text{ lb.} \times 40}{\frac{2.5 \text{ lb.}}{\text{in.}^2}} = 48 \text{ in.}^2$$

With the increased bearing area, the thickness required of material No. 3 would be

$$T = \frac{C h}{G_m} = \frac{4.6 \times 30 \text{ in.}}{40} = 3.5 \text{ in.}$$

The minimum cushion factor for material No. 6 occurs at a stress of 10.2 lbs. per square inch; therefore, the bearing area must be reduced from 20 to 11.8 sq. in. With the decreased area, a 3.8-in. thickness of material No. 6 would be required, which is slightly greater than requirements for material No. 3. Material No. 6 might still be a better cushion, however, because its bearing area was reduced. The increased area of No. 3 would require extra blocking and it might increase the cube of the pack.

#### Approximate design

If some uncertainty can be tolerated in the protection given an article, it is possible to simplify cushion selection and design. Let  $C_a$  be an approximate cushion factor such that  $C_a - 0.1 C_a$  equals the minimum cushion factor for a given cushion. Then it is possible to establish a range of stress over which  $C_a$  may be used with a maximum error of  $\pm 10\%$ . Fig. 8 shows that the cushion factor of tangent (Nos. 1 through 8) cushions varies slowly around its minimum as a function of stress. This effect has also been observed by Best (1). Table II shows average cushion factors and stress ranges for materials Nos. 1 through 8. This tabulation, along with equations [5] and [6], gives sufficient information to design cushioned packs with a maximum uncer-

tainty in the level of protection (maximum stress) of  $\pm 10\%$ .

To illustrate the use of this method, the problem given earlier is again solved. The maximum stress of 6 lbs. per square inch falls within the range listed for materials Nos. 5, 6 and 8. Of these materials, No. 5 has the lowest approximate cushion factor so that it will require the least thickness. The thickness for material No. 5 will be, using equation [5],

$$T = \frac{C h}{G_m} = \frac{5 \times 30 \text{ in.}}{40} = 3.75 \text{ in.}$$

Since the correct answer, based on the calculations shown for method 1, for material No. 5 is 3.5 in., the error is 7.2%. It is possible, of course, to change the bearing area as described above, so that the maximum stress falls within the stress range of a given cushion.

With an uncertainty of  $\pm 10\%$ , a cushion might be underdesigned, but this would probably be compensated for by other factors. For example, it seems unlikely that the error in  $g$ -values, which may vary from 50 to 100% and the uncertainty of the height of drop, which is an assumed value, will ever be less than  $\pm 10\%$ . Furthermore, several factors, such as the cushioning effect of the container and dropping surface and the friction between the cushion and the sides of the article, tend to make design conservative.

A disadvantage in the approximate method of design, however, is that it is difficult to establish stress limits and approximate cushion factors for materials with stress-strain curves that are not all members of a single family of curves. The curves for material No. 9 (Figs. 7, and 8), for example, do not belong to the same family as the other eight materials. Although material No. 9 has a low minimum cushion factor, the  $\pm 10\%$  limitation on stress would give it a narrow stress range, which would put it in unfavorable competition with other materials. With a wide range of stress, however, material No. 9 could compete favorably.

Since the stress-strain curve of material No. 9 is unusual, this difficulty is not often encountered with commonly used cushions. This demonstrates, however, the advantage in using the exact method when cushion design is not confined to cushions with one type of stress-strain curve.

#### Quick-estimation method

The coefficient,  $C$ , in equation [5] depends on the shape of the force-displacement or stress-strain curve, whichever is used to describe the energy-absorbing capacity of a cushion. If the general shape of these curves for available cushions is known, then



a specific value of this coefficient can be used to estimate cushion thickness.

**Ideal and linear cushions.** Because the force-displacement curves for ideal and linear cushions can be represented mathematically, the cushion thickness can be calculated exactly if  $h$  and  $G_m$  are known. The minimum displacement of an ideal cushion (Fig. 5) is

$$S_{\text{ideal}} = \frac{h}{G_m} \quad [7]^4$$

where  $S_{\text{ideal}}$  is minimum displacement of an ideal cushion.

Since equation [7] allows no room for cushion at maximum displacement, it is convenient to combine equations [4] and [7] to obtain the minimum thickness of an ideal cushion as

$$T_{\text{ideal}} = \frac{1}{s_m} \frac{h}{G_m} \quad [8]$$

where  $s_m$  is the strain at maximum displacement in inch per inch. For a linear cushion (Fig. 5), the minimum cushion displacement is

$$S_{\text{linear}} = \frac{2}{G_m} \frac{h}{G_m} \quad [9]^5$$

where  $S_{\text{linear}}$  is the minimum displacement of a linear cushion. By combining equations [4] and [9], we obtain the minimum thickness of a linear cushion as,

$$T_{\text{linear}} = \frac{2}{s_m} \frac{h}{G_m} \quad [10]$$

Application of equations [8] and [10] will be illustrated in a paragraph that follows.

**Anomalous cushions.** Of the nine cushions analyzed for this report, eight are described as having tangent-type elasticity even though they are not analyzed by exact tangent functions. Cushion No. 9 is the exception. Over the wide range of stiffnesses included by these eight materials, it is always possible to obtain a cushion factor of approximately five by choosing a cushion with the proper stiffness. Therefore, it is assumed that, for approximately tangent-type materials, the thickness of a cushion with proper stiffness can be estimated in general by

$$T = \frac{5}{G_m} \frac{h}{G_m} \quad [11]$$

The selection of a cushion of proper stiffness for equation [11] to be valid has already been discussed in the section on exact cushion design. For the tangent-type materials analyzed in this report, the stiff-

<sup>4</sup>This equation holds only if a cushion of proper stiffness is used. The force constant must equal the maximum force exerted on the article, that is, if a spring of proper stiffness was used, equation [7] would not hold.  
<sup>5</sup>This equation holds only if a cushion of proper stiffness is used; the spring rate must equal the maximum force exerted on the article divided by the maximum displacement.

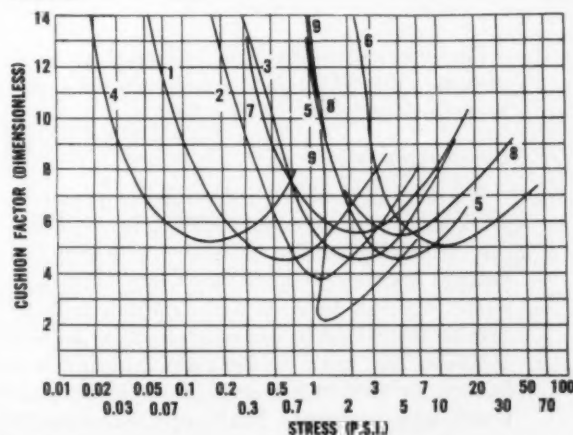
**Table II: Summary of stress ranges and approximate cushion factors for materials 1 through 8**

Material	Approximate cushion factor $C_a$	Stress range $f = \frac{W G_m}{A}$
	Dimensionless	P. s. i.
1	5.1	0.28 - 1.4
2	4.3	.6 - 2.0
3	5.1	1.0 - 4.7
4	5.8	.05 - .4
5	5.0	2.3 - 10.0
6	5.6	5.0 - 30.0
7	6.2	.95 - 5.8
8	6.1	2.0 - 13.0

ness will generally be proper if the strain at maximum displacement is between 0.4 and 0.65.

As an example of estimating cushion thickness with equations [8], [10] and [11], let the height of drop equal 30 in. and the maximum g-value equal 50. Since equations [8] and [10] include strain, it is necessary to assume a strain in order to compare them with equation [11]. If we assume  $s_m$  to be 0.5, then equation [8] would require a 1.2-in. thickness for an ideal cushion, equation [10] would require 2.4 in. for a linear cushion and equation [11] would require 3 in. for a tangent cushion. Although 3 in. may be the best thickness for many cushioning materials, it can be assumed that the thickness could be cut in half if a cushion of proper stiffness with a force-displacement curve that is partly concave downward, such as the curve for material No. 9,

**FIG. 8**



**Cushion-factor stress curves for the nine materials analyzed in this article.**

were used. Over a limited range, this type of cushion somewhat resembles the ideal cushion.

This method of estimating cushion thickness would be useful to engineers who set up packaging requirements. For example, once they knew that a 48-in. drop and a g-value of 10 would call for 24 in. of tangent cushioning, according to equation [11], they would realize such requirements were impractical. (Actually, 24 in. would be less than required, because the cushion thickness would be greater than one-fifth the height of drop.) Even if this figure were cut in two through the use of special cushions, it would still not generally yield a practical answer. It may seem naive to juggle height of drop and maximum g-value to fit a preconceived value of proper cushion thickness rather than just guess the thickness and stiffness of cushion required for a given article. However, by determining  $h$  and  $G_m$ , each type of cushion is given an equal chance to meet the requirements by the methods given in this report.

The cushion design resulting from different types of cushion can be compared by comparing the thickness efficiency of the cushions. Thickness efficiency has been defined in (4) as

$$\text{Efficiency} = \frac{T_{\text{ideal}}}{T} \times 100\% \quad [12]$$

where  $T$  is the measured thickness of cushion in inches and  $T_{\text{ideal}}$  is the thickness of cushion with ideal elasticity (maximum strain = one) for the same cushion-design problem in inches. Thus, the efficiency of a linear spring can be obtained from equations [8] and [10] as 50% when  $s_m$  is one. For a linear spring that bottoms at a strain of 0.5, the efficiency would be 25%. From equations [8] and [11] the efficiency of cushions is

$$\text{Efficiency} = \frac{1}{C} \times 100\% \quad [13]$$

For commonly available tangent cushions, such as Nos. 1 through 8, the maximum efficiency will be approximately 20% ( $1/5 \times 100\%$ ).

### Conclusions

The three methods of cushion design presented are in many respects complementary. The formulae for "estimating cushion thickness" will help the package engineer determine reasonable design criteria. They will be particularly useful if reliable data on article fragility and rough handling are not available. The "exact cushion design" method will be most useful when it is desirable to obtain maximum thickness efficiency. The "approximate cushion design" method will be the simplest to use because it is completely tabular and no curves are required

by the user. The most convenient way to use this method would be to list the average cushion factor and stress range for each material, along with other pertinent information, such as cost, density, fire resistance, effect of moisture, compression-set characteristics and availability data.

Although a calculator could at any time be set up for computing  $\frac{WG_m}{A}$  and  $\frac{Ch}{G_m}$ , the operations are

purely arithmetic and can be performed by long-hand, slide rule or calculating machine. When cushion factor-stress curves based on a generally accepted test procedure are available for most commonly used cushioning materials, it may be practical to construct various tables and calculators for use by cushion designers.

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Staple gets glamour...

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#### Cracking of polyethylene sheet

**Q.** We fabricate several kinds of plastic sheeting into waterproof covers, box and drum liners. The plastic can be from 5 to 20 mils in thickness. We use heat sealers for all seams and seals, with solvents as activators for some plastics. We have been using increasing amounts of polyethylene and have had some complaints of seal failures. We examined the returned liners and found cracks of various sizes where the liners had been folded for packing. We have had very few such complaints, but they disturb us because the seal was well made and we do not know the cause of the cracking. Can you tell us why this occurs only with polyethylene and what causes it?

**A.** Thick sections of many plastic sheetings may carry strains resulting from the manufacture of the sheeting. The magnitude of the strains will depend on the type of resin, the method of manufacture and the thermal history of the sheeting.

The presence of these strains can be shown by shrinkage as the sheeting is warmed or heated, or by applying solvents or so-called surface active agents which produce cracks or crazing in varying degrees.

It may be that the solvents you are using are causing stress cracking where the finished liners are heavily stressed where they are folded. It is also possible for heat-sealer release agents to cause cracking under these conditions.

The answer is to seal polyethylene without added solvents and to check carefully the type and amount of release agents that are used on the heat-sealed surfaces.

There should be no need of using solvents to help seal polyethylene film if the temperature and pressure are carefully controlled in a well-designed heat sealer. Also, there would be some benefit from using tubes or pads over which the finished liners

are folded to reduce the sharpness of folds.

#### Printing on films

**Q.** We are using a plastic film bag for one of our educational toys. This toy is a set of painted wooden shapes. Occasionally, we have units returned to us that have the paint peeled off by the plastic bag. Can you tell us why this happens and how to prevent it?

**A.** Many plastics films and lacquer-based paints contain plasticizers that are necessary to impart flexibility to the resin films. It may be that one of your wooden shapes is coated with a formulation which contains a plasticizer that is soluble in the plastic film. Or possibly the film contains a plasticizer that is soluble in the toy's coating. The third possibility is that both the plastic film and the toy coating contain plasticizers that are mutually soluble.

If any of these three conditions is true, then the toy and the film will adhere with some degree of adhesion, depending upon the time, the temperature and the pressure of the contact.

The answer is to have your laboratory test each coating formulation for adhesion to the packaging film, using both dry and humid conditions. It will be an easy matter to improve the particular color or formulation that is presently causing your complaint.

#### Insulating a shipping case

**Q.** We manufacture many kinds of flavorings and toiletries and ship them to all parts of the country. We are concerned about the freezing of some products during winter shipping and handling. We would like to insulate the shipping cases and have tried several insulating materials. However, the labor cost is very high for adding these insulations on

the production line because we have so many different sizes of cases. Is there an insulating material that could be sprinkled into the case or some other simple means of insulating a shipping case?

**A.** No amount of shipping-case insulation can prevent the freezing of a product if the temperature is low and the time of exposure very long. For example, a shipping case in an unheated truck or warehouse during a sub-zero night or week end would not protect the contents.

Some protection against freezing can be added to a shipping case, but this should be considered as an added margin of safety for winter shipments while all other possible safeguards should be continued.

A pourable type of insulation would have doubtful virtue because it would not stay between the packages and the case wall. Such insulation could also break up or become compacted.

The simplest answer, aimed at reducing labor costs, would be a double-wall corrugated case. Such a case could be used in winter months and a single-wall case used for the rest of the year.

Another method would be to use a slightly oversized case and insert a pre-scored strip of corrugated around the sides. Such a case should have either full flaps or an added corrugated pad placed both in top and in bottom of the case.

The various forms of double corrugated constructions will provide good heat insulation at a reasonable cost and will also add physical protection to reduce damage to or breakage of the packages.

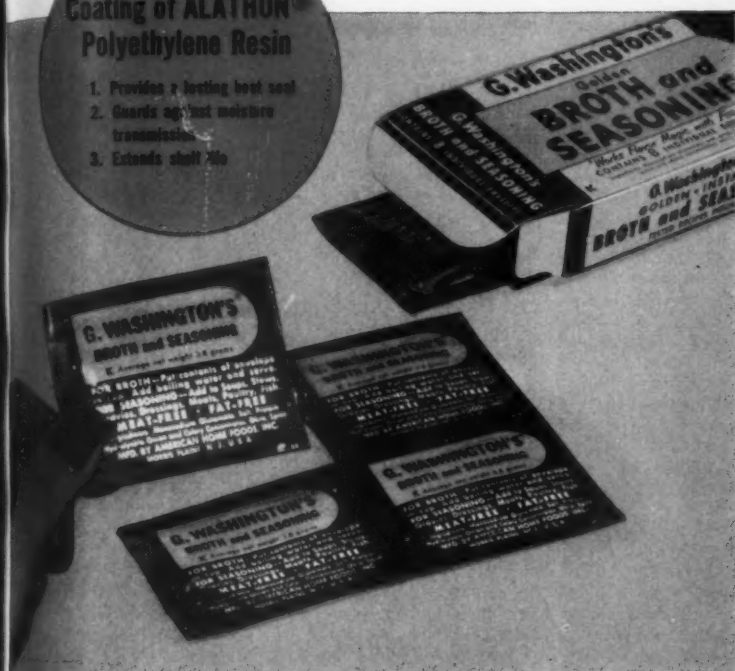
**CORRECTION:** Our apologies to Mr. Howard M. Weiner of Picatinny Arsenal, whose name as author of the article, "Cushion Sorption" in our January issue appeared as "Harold" M. Weiner. Howard it is.



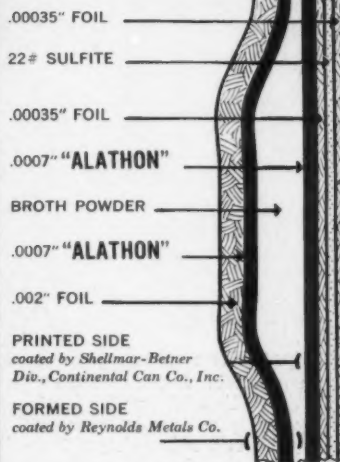
# See how new package prevents lumping of broth and seasoning powder

## Coating of ALATHON® Polyethylene Resin

1. Provides a lasting heat seal
2. Guards against moisture transmission
3. Extends shelf life



## CROSS SECTION of 3-Dimensional Individual Service Packet



A free-flowing broth and seasoning powder has definite sales appeal . . . but keeping the powder in that easy-to-use form presented a problem to G. Washington's Division of American Home Foods, Inc. When moisture entered the package, the powder became lumpy and hard.

A brand-new packaging idea was the solution. A three-dimensional service packet was created and produced by Monon-Keller Corp., of Roseland, N. J. Now the powder stays dry and free-flowing right to the kitchen.

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odorless, non-toxic . . . keeps freshness and flavor intact.

Perhaps the many advantages of "Alathon"—specially developed as a coating resin by Du Pont—can help you solve your packaging problems. "Alathon" resists most oils, greases, acids and alkalies—stays flexible through a wide temperature range. We'll be glad to send you more information. Just clip and mail coupon below.

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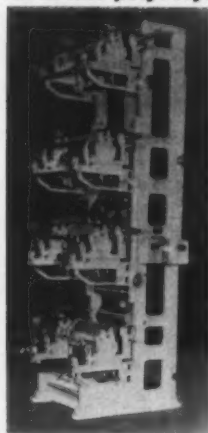
Company

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City  State

## Equipment and materials

### An in-line polyethylene printing press



that is said to save space, time, labor and film has been announced by the Manhasset Machine Co., Mineola, N. Y. The vertical four-color flexographic printing press, specially designed to fit a narrow space between a polyethylene film extruder and a bag maker, is 10 ft. high, occupies less than 2 sq. ft. of floor space and permits continuous two-color printing of film without any down time for change-over from one design to another, according to the manufacturer. While the machine is printing one two-color design, the remaining two printing stations are made ready for the next job. Then, at the appropriate time, the first two color units are dis-

engaged and the second pair are brought into contact with the moving web. According to Manhasset, in-line printers of this type can be made in either vertical or horizontal frames, in printing widths of 12 to 36 inches.

### Polyethylene molding compound

is now available from the Catalin Corp. of America, 1 Park Ave., New York 10. Catalin's Molding Compound 15-5 is a general-purpose formulation, according to the company, adaptable to a wide variety of items, including packaging. The company plans to supplement this new compound shortly with a complete range of polyethylene formulations for special applications.

### Fabricated Mylar film boxes

are now available from the Falge Engineering Corp., 214 N. Main St., Hudson, Ohio. They may be either transparent or



opaque and come in sizes from 1/2 to 5 in. They may be equipped with covers made of the same material, although covers are also available separately for use on fibre or metal tubular con-

tainers. The boxes are suggested for packaging powders, hardware and novelty items, toys, watch parts, bearings, dental supplies, etc. High rate of heat, chemical and electrical resistance is the principal advantage of Mylar film, according to the company, which reports that vials packaged in a Mylar box can be heat sterilized after loading.

### High-gloss 'cold' decorating colors

for the glass and ceramic industries, announced by the Wornow Process Paint Co., 1218 Long Beach Ave., Los Angeles 21, are reported to result in sharply lowered costs for single-trip glass containers. Trademarked "Cat-L-Ink" Process Colors, the new colors are said to effect savings as a result of decorating at point of container manufacture, thus eliminating handling to and from decorating departments. Another factor that lowers cost is elimination of lengthy high-temperature ceramic firing. Superior adhesion properties, durability and chemical resistance are reported

by the supplier. The new colors may be used on any rigid surface which will withstand the low curing temperature, including plastics, metal and wood.

### A nylon cement

that is reported to require no curing and is available in a wide range of viscosities has been announced by the Ions Exchange Corp., 44 Leonard St., New York 13. Marketed under the trade name Nylasil, the cement is reported to be effective under wide temperature ranges and to be strong and highly resistant to oils, aromatics, aliphatic solvents, fruit acids, alkalies and bleaches.

### Faster, more efficient coating

is claimed by the Potdevin Machine Co., 285 North St., Teterboro, N. J., for its new Model 2R coating machine equipped with semi-automatic friction demand feed. The



versatile machine is said to coat all kinds of jobs, from a 1-in. strip to over-all, on materials as thin as tissue paper and as heavy as index card. It is also said to be suited for any coating material—glue, latex, varnish, resin, paint, thermoplastics, etc. A coating regulator dial controls the thickness desired;

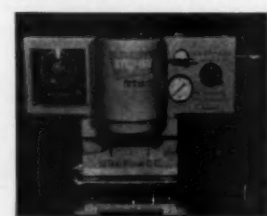
speed of delivery is controlled by the operator. The unit is adjustable for various label sizes and is available in 6-, 9- and 12-in. widths. Minimum length of label handled is 2 in. Envelope flaps may also be coated with the machine. Tank roller and tank are easily removable for simple, quick clean-up, according to the supplier.

### Conveyor line wear strips

which require no lubricants because they are of molded DuPont "Zytel" nylon resin have been announced by Fenco, Inc., 125 N. Racine Ave., Chicago 7. Designed originally for use with nylon conveyor links, these "Nylite" wear strips have been found equally useful with conventional metal chains, according to the company, and are proving economical in food-processing plants. The nylon wear strips are easily installed over existing conveyor ways. A single molded prong on each strip is pressed through a hole drilled in the way and secured with a stainless steel fastener. The manufacturer claims the strips pay for themselves within two months of normal operation in savings on soap and other lubricants.

### A new heat-sealing machine

announced by Wrap-Ade Machine Co., Inc., 83 Valley St., Belleville 9, N. J., is reported to offer positive control of all three factors involved in the bonding of heat-seal ma-



terials. The unit consists of a fixed lower jaw and a movable upper jaw. The movable jaw is activated by airline pressure on a piston in the air cylinder, pressure being regulated by the pressure regulator at any setting desired, which, in turn, is indicated on the pressure

gauge. Dwell time is governed by a standard synchronous timer that can be set for dwells up to 30 seconds. Heat is controlled thermostatically to the desired temperature. After setting the temperature, pressure and dwell time, the unit is operated by merely depressing a foot switch. The

# **NOW...every dry product can have the sales plus of sparkling glass containers**



Kimble Opticlear Vials are available in 1, 3, 5, 7, 10, and 12-dram sizes. The tooled neck of the vial and special stopper provide positive protection against moisture-vapor transmission.



Kimble Opticlear Shell Vials are available in 1, 2, 3, 4, 5, 7, 10, and 12-dram sizes. Note that the polyethylene stoppers are hollow, providing more room for contents.

## **KIMBLE OPTICLEAR VIALS...KIMBLE OPTICLEAR SHELL VIALS** *the aristocrat of all packages* *designed and priced for mass packaging*

You CAN GIVE your dry products the sales advantages of a sparkling-clear glass container—no matter what your cost requirements.

Kimble Opticlear Vials are the aristocrat of all packages. They are the finest glass containers available anywhere... are first choice by leading companies whose products demand an unusually fine and exceptional container.

Kimble Opticlear Shell Vials are

designed, produced—and priced—to make it practical for mass packaging almost any dry product.

Both of these Kimble Vials have crystal-clear clarity, gleaming beauty, unusually high moisture-vapor resistance. They are light and sturdy. The sparkling clarity of the glass provides perfect vision of contents, permits labeling either inside or outside.

Both Kimble Vials have special,

resilient, plastic stoppers to keep contents fresh and clean... free from dust, dirt and moisture. Even after stoppers are removed and replaced repeatedly, they reseal tightly... are always easy to use.

Decide now to give your dry products the advantages of sparkling glass containers. Write for information, prices and free samples. Kimble Glass Company, subsidiary of Owens-Illinois, Toledo 1, Ohio.

**KIMBLE GLASS VIALS**  
 AN **Ⓢ** PRODUCT

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## HIGH SPEED HEAT SEALING and CODE DATING

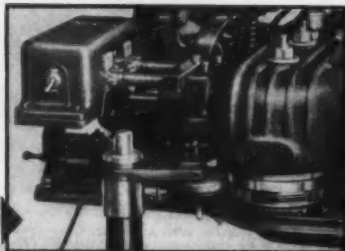
*of* **PLIOFILM,  
POLYETHYLENE**

AND OTHER PLASTIC MATERIALS



Illustrated is AMSCO Model 3 (Poly) mounted on floor stand with adjustable casters for leveling and portability. Two casters equipped with locking wheel brakes.

Closeup of code dating attachment.



Designed and built by AMSCO, the foremost manufacturers of rotary sealing machines.

### PERFECT BAG SEALING

- Heat, pressure and time fully controlled automatically.
- Film is sealed in relaxed state because weight of product in bag is supported by carrier belts of the sealing machine directly below the point of seal.

### MAXIMUM PRODUCTION

- Rotary action provides smooth, continuous, non-intermittent operation.
- The danger of costly downtime and maintenance due to heating and immediate cooling to prevent sticking to sealing means is eliminated by a special AMSCO sealing mechanism which does not require cooling.

### CODE DATING

- Available for packagers who desire a controlled shelf-life program.

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## Equipment and materials

timer automatically opens the sealing jaws after the pre-set time has elapsed. The Model J pneumatic heat sealer can be provided with standard  $\frac{3}{4}$ -in. face-crimp jaws 8 in. wide. Flat jaws are available on order.

### A new protective wrap

for perishable products, called Saran-O-Lam, has been announced by the Printon Corp., 304 E. 23 St., New York 10. Made of saran, it utilizes a special technique of rotogravure



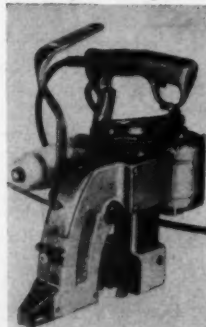
printing on the inside of one saran film, laminated with a specially developed adhesive to another clear saran film to give double-strength protection. The printing cannot be affected

by oils, solvents, fats or surface scratching, according to the supplier. The new material is suggested for meat and dairy products, candy, chocolates, metal parts and other perishable goods and items easily affected by oxidation or moisture and gas penetration. Key to the new material's advantages, the company claims, is the resulting layer of multicolored inks interlocked between two sheets of film, which are fused together to become one. Saran-O-Lam is produced in roll, sheet, tube, bag or pouch form in any commercial dimension. Like or unlike gauges can be laminated together. The material is said to run smoothly on the so-called Oscar Meyer machine, eliminating down time.

### Improved unwind braking equipment

for winder and rewinders by Kidder Press Co., Inc., 121 Broadway, Dover, N. H., is now available on all models requiring higher braking capacity. The new multiple-disk, water-cooled unit is designed to accommodate either 15- or 20-in.-diameter braking elements and is readily adaptable for assembly as a two-, three- or four-disk unit to meet a wide range of horsepower requirements. Braking action is controlled pneumatically from a control panel. Standard equipment includes a water-pressure reducing valve, permitting connection to any available water supply for cooling purposes.

### An improved portable bag closer



that is electrically powered by a  $\frac{1}{2}$ -h.p. motor and weighs only 10½ lbs. including a full cone of thread, has been announced by the Dave Fishbein Co., 2720 Thirtieth Ave., S., Minneapolis. The new unit is said to accommodate virtually every bag in use by industry, from the lightest to the heaviest textile or paper bag, whether asphalt treated or specially processed, with no change in parts or adjustments. The machine sews 40 ft. per minute. An economical suspension unit can be provided for stationary use of the unit, with a counter-weight that holds the machine at any desired height.

### Paint cans with 'spun on' ears

that eliminate the soldering operation have been developed by American Can Co., 100 Park Ave., New York 17. The gallon-size cans have been perfected, says Canco, as part of its search for tinless metal containers, in order that paint cans with conventional ears and handles can be provided during periods when tin is in short supply. The new container is said to be stronger and to eliminate the solder "splashes" found on present cans. It is produced by means



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FOR THE YEAR 1900

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ALBANY

## Equipment and materials

of a punching operation that makes two round recesses in the body blank, followed by the placing of the metal ears in the recesses and a spinning operation that crimps each ear from the other side of the blank.

### A new trademark design

has been introduced by Ekco-Alcoa Containers, Inc., 1900 N. River Rd., River Grove, Ill., to identify at a glance their containers. The design is the result of research by Ekco-Alcoa Containers' management and the industrial design firm of Latham, Tyler and Jensen to represent graphically in the most effective manner the theme, "The Plus Container." Extensive use of the trademark is planned in an intensified advertising and sales promotion campaign. Every piece of material produced by the company will carry the newly designed identification symbol.



### A small, economical package handle

made of ribbon and gummed tape, manufactured by Carry-Pack Co., Ltd., Chicago, is designed to support from 40 to 90 lbs., sticks instantly to the package and not only seals the package, but offers a convenient way of carrying it—at an average cost of ½ cent per handle unit. Wound in coils of 130 or more, the handles come in five sizes ranging from 7 to 18 in. and are dispensed one at a time, moistened and ready to apply from a dispenser. Another coil of matched gummed tape fits the machine for sealing other parts of the package. The Carry-Pack handle comes in 17 stock colors



and can be made up in special matching colors. The tape is made by Crown Zellerbach Corp., 343 Sansome St., San Francisco, and the dispenser is loaned and maintained by the Carry-Pack Co., Ltd.

### An automatic lubrication system

on high-speed automatic bacon-wrapping machines manufactured by the Globe Co., 4000 S. Princeton Ave., Chicago, is reported as providing continuous controlled lubrication for 46 key bearing parts that were formerly lubricated by hand. The new system, a forward step in automation on these machines, is designed and manufactured by the Bijur Lubricating Corp., Rochelle Park, N. J. It is said to cut manufacturing costs by eliminating or greatly reducing down time for manual lubrication, down time for repairs, parts breakage and product spoilage from the dripping of excess oil.

### An adhesive for labels,

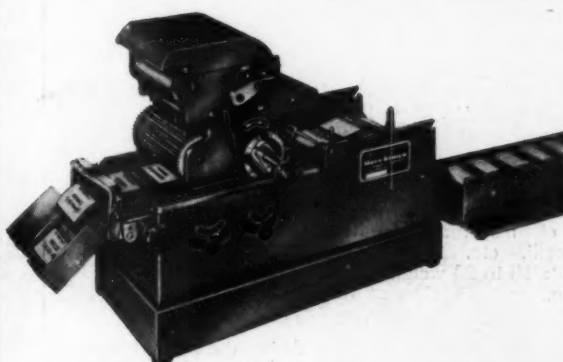
said to be capable of adhering to any surface, including polyethylene, polystyrene, vinyl and rubber, has been announced by Adhesive Products Corp., 1660 Boone Ave., New York 60. Known as Labelgrip, it is particularly designed for molded containers and is available in 1-, 5- and 55-gal. containers.

### A new type of polyethylene resin

has been announced by Bakelite Co., div. of Union Carbide & Carbon Corp., New York. Known as polyethylene DXM-103, the resin is said to produce unbreakable molded articles

# DOOM

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Imprint labels, tags and tickets, as you need them, when you need them — speedily — 2 per second. Eliminating expensive and wasteful preprinted label inventories.

**ROTO KIMCO** Codes and price marks Box-end Labels, Bag Tops, Pre-pak Labels gummed, ungummed, Heat-Seal, Pressure-Sensitive—also all types of Tags and Tickets. Supplied in FAN-FOLD for economy of storing and speed in handling.

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**ROTO KIMCO** Eliminates all types of costly rubber stamp and hand marking.



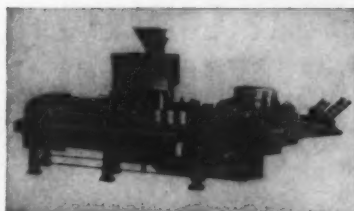
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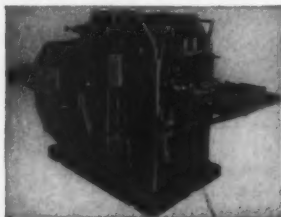
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Automatic machine for two-stage feed, bulk and final-weight, feed of macaroni, spaghetti, vermicelli, etc. Type P.P.L. Output: 18 to 20 weighings per minute.



Automatic carton bundling and wrapping machine. Type F.A. 1. Output: 9 bundles per minute.



Automatic machine for making and filling triangular containers. Type P.P.V.T.



Automatic, high precision and fast-output, vibration-feed weighing machine for coffee, rice, sugar, and other granular products, as well as bulk items such as candy, biscuits, buttons, and small metal parts. Type P.S.A.

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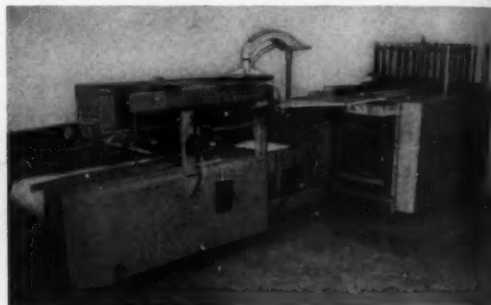
## **Equipment and materials**

with greater rigidity, more wear-resistant surfaces and higher gloss. In the packaging field, the new material is expected to make possible the production of caps and closures with greater resistance to staining by chemical contents such as cosmetics, foods, oils, acids and caustics. Other properties of DXM-103 are reported to be greater denseness than standard polyethylene resins, improved tensile strength, increased surface hardness, improved resistance to staining and slightly reduced permeability.

### **A vacuum-operated carton unloader**

which automatically removes glass containers from shipping cartons has been announced by Island Equipment Corp., 27-01 Bridge Plaza N., Long Island City 1, N. Y.

Designed to work at a rate of from six to 12 cartons per minute, the unloader includes an in-feed conveyor belt, a



vacuum-operated device that opens the outer flaps and a high-speed conveyor which brings the carton into position under a large rectangular vacuum head. Its inner flaps are automatically opened and the head lifts up empty jars, turns them at a 90-deg. angle and deposits them on the unloading plate of an unscrambler. Cracked or broken jars will not lift and are ejected.

The entire operation of the machine is automatic, with advancing cartons controlling each phase of the unloading cycle.

### **Colored stitching wire for shipping cartons,**

available in 12 different shades, has been announced by Acme Steel Co., 2840 Archer Ave., Chicago 8. Known as "Colorstitch," the wire is designed to harmonize or contrast with the colors of fibre display or shipping cartons, either to aid in producing a decorative effect or to assist in inventory control and labeling.

The new product consists of standard flat stitching wire to which a vinyl paint finish has been bonded. It is said to be resistant to chipping and peeling, and can be used with Acme's Arcuate wire-stitching method.

### **A line of food-grade adhesives**


suitable for laminating aluminum foil to paper or paper-board has been announced by Virginia Chemical Corp., Lynchburg, Va. These adhesives are said to have excellent adhesion to full hard and oily metal, good heat and water resistance and improved leveling qualities. They also, according to the manufacturer, will not thicken in the glue pan.

### **A thermoplastic adhesive**

for attaching tear tapes to cellophane webs is being offered by Pyroxylin Products, Inc., 4851 S. St. Louis Ave., Chicago 32.

This compound, known as Proxmelt 22-255, is reported to have low viscosity, excellent tack and low operating temperatures and to have been thoroughly tested on various tear-tape units.





## shelf's eyeview . . .

Which look does your package get from Mrs. Consumer? Is it one of immediate recognition, or an expression of "let me try to remember"?

Every Hazel-Atlas glass container is built to be a preview of good taste. We stress quality control in the factory and on the production line. But just as important, is EYE-IDENTIFICATION on market shelves.

Smart, well designed, recognizable H-A food containers mean sales for you.

**HAZEL-ATLAS GLASS COMPANY**  
WHEELING, WEST VIRGINIA



## Plants and people

Donald H. Dalbeck has been elected president of the Package Machinery Co., East Longmeadow, Mass., according to an announcement by Roger L. Putnam, chairman of the board. Mr. Dalbeck succeeds the late Roe S. Clark. A native of Worcester, Mass., Mr. Dalbeck is also president and treasurer of the Reed-Prentice Corp., Worcester, a wholly owned subsidiary of Package Machinery Co. He first joined Reed-Prentice in 1945 as controller and was subsequently elected treasurer, vice president and director. The company was acquired by Package Machinery in 1954.



Dalbeck

Charles U. Harvey has been appointed general sales manager of the Container Division of Robert Gair Co., Inc., New York. He succeeds John H. Macleod, who will continue with Gair in the Container Division as sales manager of national accounts. Mr. Harvey was founder and president of the Harvey Container Corp., Plymouth, Mich., which was acquired by Gair last year. Hugh C. Laughlin, executive vice president and a director of Owens-Illinois, has been elected a director of Robert Gair Co. to replace William E. Levis, a director of Owens-Illinois, who resigned from the Gair board.



Harvey

A retail carton department has been established in the Chicago folding carton sales office of Gair. To assist in establishing the new department, which will serve department stores in the Midwest, Warren G. Young has been transferred from Gair's Thames River Division, Uncasville, Conn., to Chicago.

John W. Daniels has been promoted to superintendent of Gair's Connecticut Corrugated Box Division at Portland, Conn. Mr. Daniels succeeds Joseph M. Murphy, who was recently appointed special production representative of the company's Container Division.

The appointments of C. F. Lausten as general manager of the equipment division and R. B. Thompson as general manager of the general manufacturing department have been announced by the American Can Co., New York. Mr. Lausten had been general manager of



Lausten



Thompson

the general manufacturing department, with Mr. Thompson as his assistant. C. F. Heiberger succeeds Mr. Thompson as assistant general manager of that department. C. E. Martin, Jr., succeeds Mr. Heiberger as assistant manager of manufacture in Canco's Central division.

The \$2-million addition to American Can's Pacific plant at San Francisco is now in operation. This addition reportedly makes it the largest can-making factory in the West, capable of producing one billion, 500 million metal and fibre containers annually. Ground has been broken for a new container-manufacturing plant in Salem, Ore.

The John T. Raisin Corp., San Francisco, converter of aluminum foil, has opened a new and modern plant at Bayshore Blvd. and Paul Ave., San Francisco. The new plant will provide additional facilities for conversion of foil packages and decorative gift wraps and papers for Western packagers.

The Specialty Papers Co., Dayton, Ohio, has put into operation what is said to be the first heavy-duty eight-



color rotogravure press in the commercial printing industry. The new press is 68 ft. long and can run at speeds up to 1,000 ft. per min., handling flexible packaging materials ranging from light-weight tissue up to 20-pt. board, as well as aluminum foils, cellophane and films.

Morris Messick, public relations consultant, has joined The Specialty Papers Co., Dayton, Ohio, as sales promotion manager. Arnold Andersen, formerly with Marathon Corp., has been appointed assistant sales manager and John Hubler has been promoted to sales-service supervisor.

F. H. Noble & Co., Chicago, manufacturers of display gift packaging, have made the following changes in their Eastern sales organization. Dewey J. Conocer, formerly of Chicago, is now New York office manager and sales representative. Ed Franzblau is New York sales representative. Arnold Hartman, former president of the Hartman Box Co., is now Atlantic Coast sales manager in charge of custom line packaging. Fred Dillingham is Attleboro represen-

tative. Dwight Thomas is sales representative in Providence. John A. Mangin is New York and Southeastern representative.

Bemis Bro. Bag Co., St. Louis, Mo., has announced the following organizational and personnel changes. Judson



Bemis



Hersey

Bemis, presently a vice president, director and director of central operations, has been named executive vice president, a newly created position. He will be replaced as director of central operations by T. H. Ashton, now manager of the Omaha plant and sales division. C. W. Akin, assistant director of sales, will be manager at Omaha. R. M. Hersey, manager of the Minneapolis General Sales Division, a director and assistant director of sales in charge of interdivisional accounts, will become sales director for national accounts and will devote full time to this activity, which is also a newly created post. He will be succeeded at Minneapolis by J. H. Eastman and M. F. P. Dallison will be special account executive there.

The St. Regis Paper Co., New York, has announced the acquisition, through an exchange of common stock, of the Chester Packaging Products Corp., Yonkers, N. Y. Chester will continue with its present management and organization as a subsidiary of St. Regis. Among the products manufactured by Chester are polyethylene, polyethylene-coated cellophane, foil and kraft paper and extruded polyethylene pipe. Its acquisition, according to St. Regis, will round out the areas in which that firm's Panelyte Division is working with polyethylene.

The St. Regis Paper Co. has also acquired 100% of the capital stock of The Gummed Products Co., Troy, Ohio, and the Ajax Box Co., Chicago. Gummed Products produces all types of gummed products and is a laminator of foils and films to paper and paperboard. Ajax is a maker of corrugated paper products. Both companies will operate as subsidiaries of St. Regis, with their same organizations and managements.

Homer W. Crawford has been appointed secretary of St. Regis Paper Co., succeeding Willard J. Dixon, who continues as a company vice president and director.

The Multiwall Packaging Division of St. Regis Paper Co. (Canada), Ltd., has transferred its sales and engineering offices from Hamilton, Ontario, to 360



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She's on the trucks  
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that deliver the goods.  
For quality corrugated, be sure  
she's on the boxes you buy!

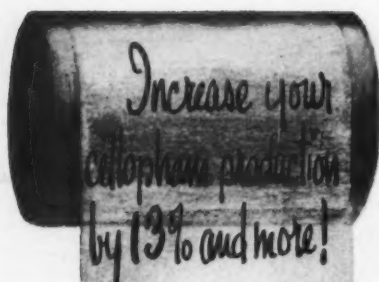


**HINDE & DAUCH**

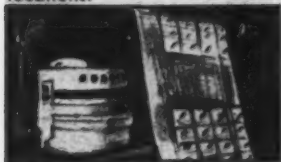
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With the close-to-operation Walton Humidifier which overcomes hazards in 3 critical locations.



**on a web**—cellophane passing through a press is dried in hot DRY air that sets the ink. Moisture should be replaced to maintain strength and good working properties.



**in a spot**—cellophane converting machines run fast. Friction causes static. Static causes trouble—unless it flows into air with enough moisture to drain the current.



**in storage area**—cellophane in heated air loses moisture to air, becomes brittle, tears easily. A humidifier avoids this by balancing moisture in the air automatically, thus keeping moisture in the cellophane.

Send coupon for free information from manufacturers of cellophane about importance of humidity in work-day cellophane.

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Please send the information on the role of humidity in cell.

## Plants and people

Bay St., Toronto. Colin M. Marquis has been named Ontario district sales manager at the new office, succeeding T. P. Kidd, who has retired.

F. J. Kress Box Co., Pittsburgh, will erect a board machine and auxiliary equipment to produce for Kress their total semi-chemical corrugating material requirements for their Eastern operations. The mill is to be located in the south and it is contemplated that the machine will be in operation by Jan. 1, 1958, initially producing 55,000 tons annually.

The Birmingham Paper Co., Birmingham, Ala., has named J. Holland Folkerth vice president of the packaging division and John Cleage, III, vice president in charge of production. Elected secretary-treasurer of the firm is F. Norman Anderton.



Chandler

R. Carl Chandler has been named board chairman of Standard Packaging Corp., New York. Former vice president of Union Bag & Paper Co., he is a director of several other firms and continues as a director of Standard Packaging Corp. Mr. Chandler, at the age of 38, is one of the youngest executives in the packaging industry.

National Starch Products, Inc., New York, has opened a new plant at Plainfield, N. J., to provide additional facilities for the production of rubber and other solvent adhesives. The new installation will permit expanded production of specially formulated adhesives for use in the laminating and rigid bonding fields. These products are among those developed at National's Alexander Research Laboratories.



Burns

The Wright Machinery Co., Durham, N. C., has opened Southwestern district sales-service headquarters in New Orleans with D. Floyd Burns, Jr., as manager. Wright, a subsidiary of Sperry Rand Corp., manufactures automatic packaging machinery. The new district includes Arkansas, Kansas, Louisiana, Mississippi, New Mexico, Oklahoma and Texas.

The Tube Manifold Corp., Buffalo, maker of tubular components for steel pressure containers, has acquired a 125,000-sq.-ft. building at 415 Bryant St., North Tonawanda, N. Y., which will provide three times the manufacturing space of its present factory. All offices and manufacturing operations will be moved to the new plant this month.

Theron Russell has joined the staff of the Ace Carton Corp., Chicago, as mechanical packaging sales manager. This new position has grown out of an expanding need for a department to assist sales personnel and customers in mechanizing packaging operations. Mr. Russell's experience includes several years as



Russell general manager of Frank D. Palmer, Inc., a firm which later merged with Package Machinery Co.

The new carton converting plant built in Denver by Fibreboard Products, Inc., San Francisco, is now in operation. The plant is designed for high-speed, straight-line production of cartons and Pure-Pak milk containers.

The Signode Steel Strapping Co., Chicago, has appointed Joseph F. Beckman as assistant director of sales and manager of steel industry sales. Mr. Beckman joined the company in 1925.

American Bag & Paper Sales Corp., Philadelphia, has assigned Harold P. Williams as sales representative to cover New Jersey, Pennsylvania and Ohio.



Barnett

Raymond Barnett has been appointed general sales manager of the J. W. Wilson Glass Co., Inc., Brooklyn. Mr. Barnett will also manage and coordinate sales of the Wilson Plastic Container Corp. and Baltimore Metal Products, Inc. Mr. Barnett recently resigned as vice president of Old Empire, Inc.

Nashua Corp., Nashua, N. H., has established an Atlanta, Ga., sales office headed by Donald T. Currie. Mr. Currie will sell products of Nashua's Gumming Division and printed polyethylene in 11 Southern and Southeastern states.

Joint U. S. and British capital of \$150,000 will be spent on equipment to improve production in the steel drum plant at Bristol, England, owned by Rheem Mfg. Co., New York, and John Lysaght, British steel producer. The factory will be equipped to produce fully lithographed 55-gal. drums.

Howard P. Heilman has joined American Viscose Corp.'s Film Division as a salesman in the Chicago office. He will handle Avisco cellophane sales in Chicago's Southern side and in Gary and Hammond, Ind. Thomas W. Trainer has been transferred from Fredericksburg, Va., to the firm's new warehouse in Los Angeles. Richard E. Glenn,



formerly a Chicago salesman, has been transferred to Western and Northern Michigan.

H. H. Gritzan, Jr., is now vice president in charge of the Metropolitan District of the Maryland Glass Corp., Baltimore, Md. Mr. Gritzan for more than 30 years



H. H. Gritzan J. R. Gritzan Edward Lewis

has been in charge of the company's Metropolitan operation, which covers all of New England, Greater New York and as far south as Trenton. J. Randall Gritzan has been named assistant to H. H. Gritzan, Jr., covering New Jersey, part of New York and part of New England. Edward Lewis is now handling sales in Brooklyn, part of New England and part of New York.

Shawinigan Resins Corp., Springfield, Mass., has opened the laboratories of an addition to its research building which will more than double the company's research facilities. The company now plans a second expansion to cost more than \$300,000, which is expected to be ready for occupancy during the fourth quarter of this year. Total research facilities now include space for the present staff of more than 40 chemists. By the end of 1956 the research building will encompass 30,000 sq. ft. of laboratory, office space and a complete applications research laboratory.

The West Virginia Pulp & Paper Co., New York, has named Carl O. Skoggard assistant manager for production at its Covington, Va., mill. Edwin K. Scholz succeeds Mr. Skoggard as superintendent of the pulp mill.

David L. Luke, Jr., president of West Virginia Pulp & Paper Co., is participating in a program to raise \$430,000 for The New York Public Library's 1955-56 fund drive. Mr. Luke will enlist the help of representatives of the paper and pulp industry.

The New York area office of Hobbs Mfg. Co., Worcester, Mass., has been moved to 821 Eighteenth Ave., Irvington, N. J. Sales and service on all Hobbs converting machinery in this area will be under the direction of George E. Mansfield, who will also supervise installation of Hobbs engineered winding and engineered cutting programs.

The formation of two new corporations, Wilson Plastics of Missouri, Inc., and Wilson Containers, Inc., has been announced by Wilson Plastics, Inc., Sandusky, Ohio. Wilson Containers, Inc., initially will manufacture and sell plastic containers. Manufacturing will be

[Continued on page 162]

One good label  
deserves a nother...

Here's why Hiram Walker chose  
**AVERY Self-Adhesive LABELS**  
for their Luxury-Wrap packages

Hiram Walker's new personalized Holiday gift packages presented a tough labeling problem. Their packaging would work as planned only if the labels could be removed and resealed.

Avery's Kum-Kleen Pressure-Sensitive Labels were selected for all nine of their unique gift wrapped boxes because they are self-adhesive, require no moistening, are easily removed...yet can be used for instant re-sealing simply by pressing them on again.

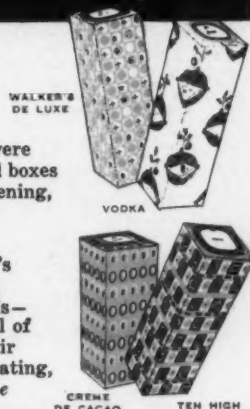
Although Avery's ability to meet Hiram Walker's production and delivery needs was an important consideration in their choice of Kum-Kleen labels—the deciding factor was Avery's complete control of production from start to finish. Avery makes their own adhesives and do their own designing, laminating, die-cutting, printing and embossing. Avery is the only manufacturer of pressure-sensitive labels with all of these facilities.

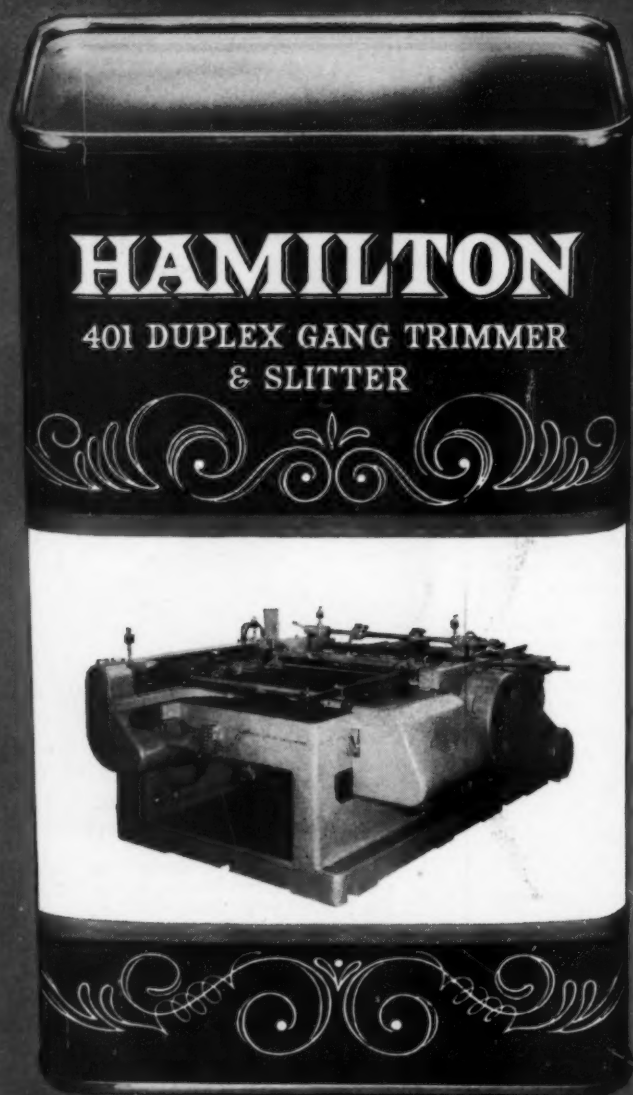
What a difference **AVERY Kum-Kleen LABELS** make!

**AVERY**  
PRESSURE-SENSITIVE  
**LABELS**

Write today for full details on Hiram Walker's special labeling problem and other case histories that show why Avery Pressure-Sensitive Labels were the best answer. Perhaps you also can use Avery Labels profitably on your products or packages.

**AVERY ADHESIVE LABEL CORP., Custom Div. 127**  
117 Liberty St., N.Y. 6 • 1616 S. California Ave., Monrovia, Calif.  
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## proven cost-cutters

HAMILTON 401 Duplex Gang Trimmer and Slitter is about 40% faster than other new slitters, easily meets the need for higher production rates. Its streamlined, simplified design provides maximum accessibility and easy adjustments. Both units mounted

solidly on a massive, heavily reinforced base prevent distortion and misalignment. Greater accuracy is assured by its ruggedness and precise gauging. It exactly duplicates litho press gauges. It'll cut your rejects, improve your product quality.



HAMILTON 301 Scroll Shear cuts costs by boosting strip output and saving 4% to 7% in flange required for can ends, bottle caps, screw caps and other closures. It's capable of handling sheets from 25" to 36" square up to 125 strokes per minute. Long life

slide and sturdy frame design assure true die alignment, maximum die life and extremely accurate spacing as each can is exactly positioned. It's fully equipped with all the latest safety devices including a built-in slip clutch and magnetic brake.

## for can-makers . . . .

It will pay you to check these two automatic, high-speed machines and others in Hamilton's complete line of can-making machinery. Why not write today for details on revolutionary

Hamilton equipment that can cut drastically the cost of every step in your can-making line. Address: Hamilton Division, Baldwin-Lima-Hamilton Corporation, Hamilton, Ohio.



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**BALDWIN-LIMA-HAMILTON**



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says Robert  
Sydney Dickens,  
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**\*professional quality photo lettering  
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"Where speed, quality or volume is required for display type or lettering as a guide in comprehensive layouts and for finished art . . . we always have the right answer right in our own office—Filмотype!"

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Send me complete details about the Filмотype photo-composition machine. I am also interested in a free demonstration in my own office.

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ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

## Plants and people

[Continued from page 159]

done in Sandusky at the Midland Plastic Molding Co. plant for the present.

A two-thirds interest in the Wyndmoor Mfg. Corp., a New Jersey corporation, has been purchased by the Industrial Raw Materials Corp. Wyndmoor has new manufacturing facilities for laminating, coating, impregnating, embossing and vacuum forming of textiles, plastics, foils and papers for the packaging field and will continue to produce its present line of greaseproof and water-vaporproof barrier wraps. Charles H. Sawyer has joined the company in an executive capacity and Howard Feingold, former New York sales representative for Wyndmoor, has been retained in an executive sales capacity. Administrative and sales offices have been moved to 575 Madison Ave., New York.



Ennis

The Paterson Parchment Paper Co., Bristol, Pa., has appointed Robert E. Ennis as Eastern sales manager. His headquarters will be at 122 E. 42 St., New York. Mr. Ennis has been with Paterson since 1951 and had been a New York sales representative.

Fred A. Fogg has been named manager of the newly created mechanical division of the G. T. Schjeldahl Co., Northfield, Minn. The new division manufactures polyethylene film bag-making machines. The firm is one of the pioneers in the use of Mylar film and makes heat-sealing tapes for polyester films.

The Celon Co., Madison, Wis., maker of cellulose caps and bands, has appointed the Latchford-Marble Package & Supply Co. of Los Angeles and the Latchford-Marble Container & Supply Co. of San Francisco and Fresno as sole California distributors for Celon.

Arnold R. Witto, formerly with the Deerfield Glassine Co., has joined The Morrill Press, Fulton, N. Y., as sales manager.

George K. Huggins has been transferred from the Cleveland office of the Brockway Glass Co., Inc., to the firm's St. Louis office.

Tom Swan, formerly executive vice president and general manager of American Brands Corp., has been elected president of the newly organized Cello Packaging Co., San Carlos, Calif. The new company recently acquired from the American Brands Corp. their high-speed packaging equipment for handling foil, cellophane and similar materials and will engage in packaging private-label products for distributors and man-

ufacturers, and the development of hydrated food products. Rene Blanquies, former vice president of Sierra Candy Co., is general manager and treasurer of the new company.



Schott

After 41 years of service with his company, Carl M. Schott has retired as a vice president of the Hinde & Dauch Paper Co., Sandusky, Ohio. Mr. Schott was responsible for Hinde & Dauch sales in Michigan, Ohio, Indiana, Western Pennsylvania and West Virginia.

Kirchheimer Bros., Chicago, manufacturer of wrapping papers and bags, has established its own complete folding box manufacturing operation. The new company, Inland Folding Box Corp., located at 3434 S. LaSalle St., Chicago, will be under the production management of Harold Geiger, formerly with the Butler-Wilson Paper Co. The new firm is wholly owned Kirchheimer subsidiary.

The Robertson Co., Louisville, Ky., has appointed E. J. Condit as representative of its Gravure and Aniline Ink Division. He will represent Robertson throughout the Midwest. To supplement the expanding operations of the company in this field, Joseph Swain has been added to the Robertson laboratory staff as ink chemist.

Alfred M. Hartley, Jr., has been appointed technical sales manager of the Paper Chemicals Division, Nopco Chemical Co., Harrison, N. J.

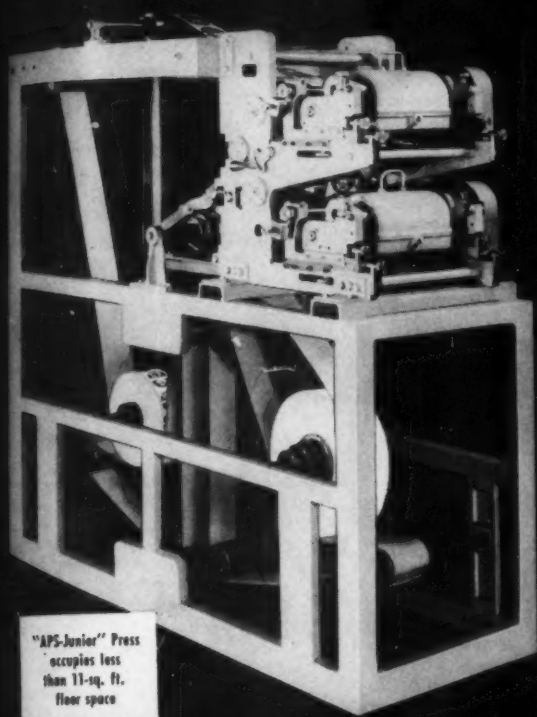
The Chase Bag Co., Chicago, has named John P. Grady assistant general sales manager. He will be located in the company's general sales office in Chicago. J. A. Sutherland has been appointed manager of export sales to succeed N. G. Kappler, who has retired. The Chase Bag Export Division has been moved from New York to the firm's New Orleans branch at 4500 N. Dorgenois St. Harrison B. Rue, former Buffalo branch manager, is now Eastern regional sales director with headquarters in Buffalo.

Also announced by Chase is the appointment of J. T. Cleland as sales manager of the Dallas branch. Tom A. Eadon, Jr., is now sales manager of the Chase Philadelphia branch.

W. C. Ritchie & Co., Chicago, subsidiary of Stone Container Corp., has appointed W. C. Lassman as assistant sales manager and John Hovezak as sales promotion manager.

Owens-Illinois Glass Co., Toledo, Ohio, has formed a new International Division with John L. Gushman, Administrative





"APS-Junior" Press occupies less than 11-sq. ft. floor space

The little press that does a big job

## NEW MANHASSET *miniature* FLEXOGRAPHIC PRESS

for multicolor printing of  
CELLOPHANE • POLYETHYLENE • FOIL  
TISSUE • KRAFT • BOXBOARD  
in webs up to 12" wide

The MANHASSET "APS-Junior" is a rugged, precision-engineered, narrow-web flexographic press for quality printing of all flexible packaging materials. Ideal for both commercial production and laboratory use because it takes so little space...is only 2' wide by 5 1/2' long. Runs at speeds up to 400 fpm, takes mill rolls up to 28" diameter...is available in 4" to 12" widths for 2, 3 or 4 color printing. Equipped with exclusive non-splash fountains, new type of constant tension control, other "big-press" features.

Send for new "APS-JUNIOR" bulletin

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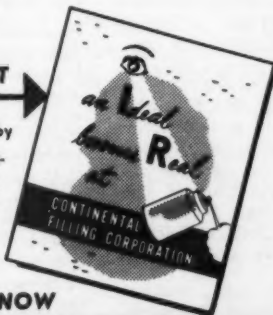
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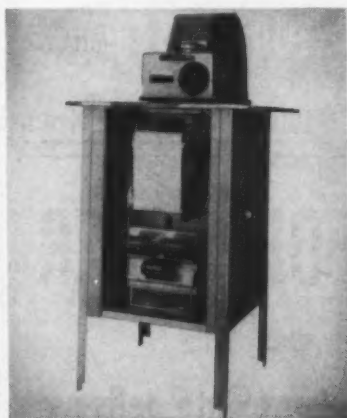
## THE "DATAMATIC" WEIGHT CALCULATOR

HELPS PRODUCE  
BETTER WEIGHTS  
ON ANY  
PACKAGE LINE

IT — GRAPHS  
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IT — AVERAGES  
GROUP LOTS

IT — TOTALIZES  
PLUS & MINUS



IN 1956 WE HAVE ADDED  
the "CURVOMATIC"  
attachment to the  
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**FREQUENCY  
CURVE CALCULATOR**

### PHARMACEUTICAL TRADE:

We now offer the "Datamatic"  
with a scale that reads  
within one (1) mg.

**SCALE SPECIALTIES  
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ROSELAND, N. J.

Request demonstration or circular matter.

## Plants and people

Division vice president, as general manager. The new division will be responsible for all O-I business outside the continental limits of the United States. John D. Northup has been appointed a vice president in the Administrative Division and succeeds Mr. Gushman as head of administrative services.

Keith Conrad has been promoted to chief engineer, Pacific Coast Division of Owens-Illinois. He will be succeeded as chief project engineer, General Research Department, Toledo Technical Center, by Robert R. Denman.

In the O-I Glass Container Division, J. J. Geagan has been named manager of the prescription ware division; Roy G. Burton is now field manager of retail sales and Robert A. Dube is field manager for wholesale sales.



Faymonville

Lynch Corp., Anderson, Ind., has named W. J. Faymonville export manager in charge of packaging machinery sales. Mr. Faymonville had been manager of the Lynch Canadian Division in Toronto, Canada. He will now headquarter in Anderson, Ind.

Rose Hill Lithographers, Inc., is a new firm established at 601 W. 26 St., New York, to produce roll-to-roll lithography. The company, headed by Paul B. Deisroth as president, will produce jumbo rolls in a diameter of approximately 24 in. which can be slit and wound in a spiral tube at the same time the tube is being formed.

A 220-in.-wide cylinder board machine, designed and built by The Black-Clawson Co., is now in operation at Potlatch Forests' new pulp and paper mill in Lewiston, Idaho. Reported to be the world's widest board machine, it will increase board production by 200 tons daily.

Dairypak, Incorporated, manufacturer of sanitary paperboard food packaging, plans to construct a 125,000 sq. ft. manufacturing plant and general office on a 66-acre tract in Olmsted Falls, a Cleveland, Ohio, suburb. The \$1,000,000 plant will accommodate equipment for manufacture of Pure-Pak milk containers, ice-cream containers, etc. Dairypak is a wholly owned subsidiary of The Champion Paper & Fibre Co., Hamilton, Ohio, and The Gardner Board & Carton Co., Middletown, Ohio.

The West Instrument Corp., manufacturer of control equipment, has moved into a new building at 4363 W. Montrose Ave., Chicago.

Daubert Chemical Co., Chicago, has appointed Douglas S. Brown as sales

manager of packaging paper specialties and rust-preventive compounds. Daubert Chemical Co. was formerly the Nuc-Rust Chemical Corp.

Koppers Co., Inc., Pittsburgh, has purchased 80% of the common stock of Durethene Corp., makers of polyethylene film and tubing. Durethene will be operated as a partially owned subsidiary of Koppers. General supervision of the company will be under the Koppers Chemical Division.

Gilbert A. Pitman has joined the staff of the Packaging Research and Development Laboratory of the



Pitman

Western Waxed Paper Division, Crown Zellerbach Corp., San Leandro, Calif. Mr. Pitman has been associated for 27 years with the food and packaging industries as food technologist and packaging engineer and was with the Western

Fresh Fruit & Vegetable Container Institute until its dissolution last August.

The Dow Chemical Co., Midland, Mich., has opened a sales office in downtown Buffalo at 70 Niagara St. to service the territory in that part of New York State extending east to and including Utica. It will also serve a 10-county section of northwest Pennsylvania. Manager of the office is Eugene L. Martinez, formerly with the Dow New York office. Sales staff includes two chemical salesmen, Seward H. Mott, Jr., and Gerald L. Mitchell, and four plastics salesmen, Ross D. Visger, supervisor, Robert F. Bunker, Robert S. Crew and Donald W. Ruoff.

Oliver E. Beutel, traffic manager of Dow's Texas Division at Freeport, has been advanced to the newly created position of manager of distribution and traffic. He will coordinate distribution of Dow chemicals from all divisions to markets in this country and overseas from headquarters in Midland.

As a result of the purchase of Colt's Mfg. Co., Hartford, Conn., by The Penn-Texas Corp., Colt's is now a wholly owned subsidiary of Penn-Texas and has been set up to operate as two separate organizations. Colt plastic products, Colt packaging machinery and Colt Autosan dish-washing equipment will retain the Colt name, but will be manufactured under the re-incorporated company name of Manufactured Products Corp. Ernest Stroheim, a vice president of Penn-Texas, is president of the new corporation. Charles W. Bentley remains as general manager of the Colt Plastics Division and Herman H. Hopke remains as sales manager. Colt revolvers and automatic pistols will be manufactured by the second Penn-Texas

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CKAGING



"Tulox" slide covers extruded by  
Extruded Plastics, Inc., Norwalk, Conn.,  
for National Lock Company, Rockford, Ill.

## See what's in it (for you) with Tenite Butyrate

Enhance the appearance and sell-ability of your product by packaging it in Tenite Butyrate. Take the "Tulox" slide covers you see here, for example, extruded from this easy-to-work plastic. Chosen for its combination of toughness and resilience, even in thin-wall extrusions, Tenite Butyrate produces clear, non-yellowing, seamless covers that keep the contents in plain view, yet free of dust. Result: a more attractive, more inviting package that helps sell itself.

Butyrate is only one of three Tenite plastics that are giving merchandise an added boost from counter to

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Whether you make or use packaging materials, it will pay you to find out more about Tenite plastics and what they can do for you.

For more information about these modern, versatile plastics, write EASTMAN CHEMICAL PRODUCTS, INC., subsidiary of Eastman Kodak Company, KINGSPORT, TENNESSEE.

# TENITE

ACETATE · BUTYRATE · POLYETHYLENE

Eastman plastics for packaging

Information regarding Tenite also can be obtained from local representatives listed under "Plastics-Tenite" in the classified telephone directories of the following cities: Chicago, Cleveland, Dayton, Detroit, Houston, Leominster (Mass.), Los Angeles, New York City, Portland (Ore.), Rochester (N. Y.), St. Louis, San Francisco, Seattle, and Toronto—elsewhere throughout the world, from Eastman Kodak Company affiliates and distributors.



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LOWEST COST

# FILLMASTER

vibratory filler

*"Vibratory for weight accuracy"*

**for dry, semi-dry, free-flowing  
or slow-flowing products**

Here's a filling machine that gives you everything: up to 60 bags, cartons or packages a minute, from gram fractions to 10 pounds. Precise weight accuracy is assured by the exclusive Fillmaster vibratory action. Powders, coffee, bread crumbs, nuts, candies, popcorn, etc.—even the most delicate product is handled with ease, without damaging or bruising.

You can change from one product to another and from one container size to another in minutes. And, the Fillmaster is so easy to operate that even an inexperienced operator will get full production.

High priced? No, the low cost for a machine of this caliber will surprise you. Get the facts today . . . write for literature and prices.

ALSO ASK ABOUT OUR FULLY AUTOMATIC FILLERS

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LOOK

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Write Dept. MP  
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Flag sales attention to your product with the glitter of foilcraft "Flashmanship" . . . adapt its eye-catching sparkle to your labels, seals, wraps,

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## Plants and people

subsidiary, Colt's Patent Fire Arms Mfg. Co., Inc., in Hartford.

John H. Scherer has been appointed division manager of sales, can division, Crown Cork & Seal Co., Inc. Mr. Scherer, formerly with Permacel Tape Corp., will headquarter at 9300 Ashton Rd., Philadelphia.



Scherer  
Crown Cork & Seal has consolidated its Specialty Division and its Crown & Closure Division. The Specialty Division's plant at St. Louis, will operate as a unit of the Crown & Closure Division.

The Stecher-Traug Lithograph Corp., Rochester, N. Y., has named Ralph J. Wrenn of San Francisco as executive vice president and Richard C. Alden of Rochester as first vice president. Leo P. Blank is now vice president in charge of sales of the San Francisco Division. W. Bayard McCoy has been named to a similar post in the Rochester Division. Frank T. Sheedy is now vice president in charge of production at the San Francisco Division.

In an expansion of J. M. Huber Corp.'s Ink Division operations, Earl Linn has been named Southeastern district sales manager. The district includes North Carolina, South Carolina, Georgia, Alabama and Florida. Mr. Linn will headquarter at the new Huber, Ga., plant. Olin Boone is now Eastern district sales manager, with headquarters in Hillside, N. J. His area is from New York State to West Virginia.

Dr. Paul Erlandson, former chairman of the physics department and assistant vice president of Southwest Research



Institute, San Antonio, Tex., has been named director of the new Central Research and Engineering Division, Continental Can Co., New York. Dr. Erlandson will head the company's experimental work on the application of the principles of physics to the high-speed automatic equipment used in manufacturing and closing metal, paper, plastic and composite containers and closures, as well as to its future ionizing radiation sterilization program.

Dr. Merchant L. Cushing has joined the technical service department of the A. E. Staley Mfg. Co., Decatur, Ill. He will be in charge of the company's paper mill laboratory.

The Hazel-Atlas Glass Co. has formed a Beverage Container Sales Department at its general office in Wheeling, W. Va., under the management of H. Carman



**Crago.** T. G. Warder, former superintendent of the company's Pomona, Calif., glass container plant, has been appointed superintendent of the firm's newest glass container plant now under construction at Plainfield, Ill. C. L. Wittlinger replaces Mr. Warder in Pomona.

A new modern chemical research center will be erected by the Spencer Chemical Co., Kansas City, Mo., at 67 St. and U. S. Highway 50 in Johnson County, Kansas. The facility is expected to be completed in the spring of 1957 and will be devoted to research and development in the general fields of industrial and agricultural chemicals and plastics.



Kistner

The Arthur Colton Co., Detroit, has appointed Erwin V. Kistner as sales engineer. Operating out of New York, he will handle Colton machinery sales in Southern New Jersey, Eastern Maryland, Delaware, Eastern Pennsylvania and Washington, D. C.

The capital stock of the American Resinous Chemicals Corp., Peabody, Mass., and of Reslac Chemicals, Inc., Chicago, has been acquired by the Borden Company. The two chemical firms manufacture a diversified line of products in the resins and plastics fields. No changes in management, operating procedure or personnel of either company is contemplated.

Announcement has been made of the election of Theodore G. Montague as chairman of the board and Harold W. Comfort as president of Borden.

The Virginia Chemical Corp., Lynchburg, Va., has appointed James Snell to its Foil Adhesive Division. Mr. Snell has previously been associated in the aluminum foil industry in various technical capacities.

The Clopay Corp., Cincinnati, Ohio, has purchased a plant in Augusta, Ky., which will be used to expand its Plastic Film Division, currently located at the company's Elmwood Place, Ohio, plant. Clopay will manufacture polyethylene packaging film and their "Clopane" extruded vinyl plastic film. Operations in Augusta will be directed by Daniel P. Geeding, manager of the plastic film division, with Alfred L. Alk as plant manager. Henry Trounstone is sales manager for the division.

Catalin Corp. of America, New York, has elected Jack Weiss as vice president. Mr. Weiss joined Catalin in 1931.

The Raymond Bag Co., Middletown, Ohio, manufacturer of multiwall paper shipping sacks, is now operating as a wholly owned subsidiary of The Albe-Marle Paper Mfg. Co., Richmond, Va. Present personnel will remain intact.

Rap-in-Wax Paper Co., Minneapolis, has appointed Wraps, Inc., as its metropolitan New York representative to handle all Rap-in-Wax products and  
(Continued on page 171)

Something  
goes into  
this box  
besides  
pudding...



**NATIONAL FOLDING BOX**

**C O M P A N Y , I N C .**

**SUBSIDIARY OF FEDERAL PAPER BOARD COMPANY, INC.**

**SALES OFFICES:** CHRYSLER BUILDING, NEW YORK 17, N.Y.; NEW HAVEN AND VERSAILLES, CONN.; SOGOTA, N.J.; BOSTON AND PALMER, MASS.; STEUBENVILLE, OHIO; PHILADELPHIA AND PITTSBURGH, PA.

**FOLDING BOX PLANTS:** SOGOTA, N.J.; NEW HAVEN AND VERSAILLES, CONN.; PALMER, MASS.; STEUBENVILLE, OHIO; PITTSBURGH, PA. **PAPER BOARD MILLS:** SOGOTA, N.J.; NEW HAVEN, MONTVILLE AND VERSAILLES, CONN.; READING, PA.; STEUBENVILLE, O.; WHITE HALL, MD.

## MAKE CYLINDRICAL PLASTIC BOXES

FASTER!  
EASIER!



with these 3 Taber machines

### TABER CYLINDER MAKER



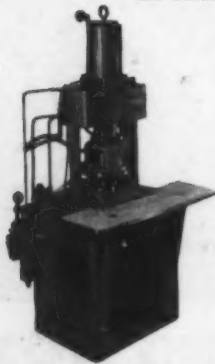
The new improved TABER CYLINDER MAKER assures greater speed and fewer rejects. Automatic sizing eliminates crooked seams, misfitting bodies, etc. Expanding mandrels (1½" to 8½" dia.) and sealing bar are foot operated, freeing both hands for feeding operation.

### TABER CYLINDER BEADER



The CYLINDER BEADER has been completely re-engineered for greater speed. Beads 500-900 cylinders per hr. Fully automatic! Operator places the cylinders in chute and completed cylinders are automatically ejected.

### DRAW PRESS FOR COVERS



Here's the new light duty TABER Pneumatic Press for drawing and forming transparent plastic sheet into round, oval or special shape closures for plastic containers. Interchangeable dies for making parts from 2" to 8½" dia. and ¼" to 1" in height. Die is maintained at exact temperature by Pyrometer Controller. Automatic trim ejection. High speed response.

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**BREAD WRAPPERS**—Quality printing plus resistance to wax bleed, high end-sealing temperatures and moisture.

**PAPER CUPS**—No bleed into drinks... no matter how hot or cold.

**PAPER PLATES**—and a wide variety of other printing and product end-use abuse problems.

Give us your specific problems... our laboratories are at your service. Write for details and samples.

A Division of Sun Chemical Corporation

GPI

General Printing Ink Company

10th Street and 44th Avenue  
Long Island City 1, New York

Offices and Service Plants in Principal Cities

### DIVISIONS OF SUN CHEMICAL CORPORATION

HORN • HUDSON • WILEY (paints, maintenance and construction materials, industrial coatings) • WILHELM (textile and industrial chemicals) • WARWICK WAX (refiners of specialty waxes) • RUTHERFORD (lithographic equipment) • SUN SUPPLY (lithographic supplies) • GENERAL PRINTING INK (Sigmund Utman • Fuchs & Lang • Light • American • Kelly • Chemical Color & Supply Inks) • MIDROLL (news inks) • ELECTRO-TECHNICAL PRODUCTS (coatings and plastics) • PIGMENTS DIVISION (pigments for paints, plastics, printing inks of all kinds)

## FOR PRODUCT IDENTIFICATION



BRANDING  
HEEL PADS & UNIFORMS  
LEATHER

BY  
**HOT DIE  
STAMPING  
WITH**

## SWIFT ROLL LEAF

- DISTINCTIVE
- PERMANENT
- ECONOMICAL

Pigment Colors, Bronze, Aluminum and Genuine Gold... Submit samples of your product for free testing.

Illustrated Free Booklet—"How To Brand Your Product"—mailed on request.

**M. SWIFT & SONS, Inc.**

10 LOVE LANE • HARTFORD • CONN.  
NEW YORK • CHICAGO • ST. LOUIS • LOS ANGELES  
Cable Address: SWIFTSONS



For complete  
product protection...

## think of **Kaiser Aluminum Foil**

1. Positive vapor barrier
2. Won't absorb liquids
3. Clean and non-toxic
4. Blocks heat and light rays
5. Imparts no taste or odor
6. Bars contaminants
7. Dimensionally stable

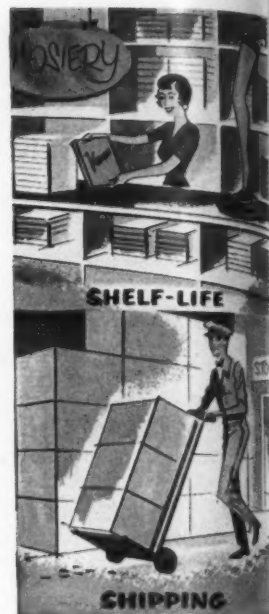
Leading converters rely on Kaiser Aluminum as a major supplier because we are an integrated operation, producing foil of *unsurpassed quality* in a wide range of specifications.

For names of converters eager to tackle your packaging problem, contact the Kaiser Aluminum sales office listed in your telephone directory. Kaiser Aluminum & Chemical Sales, Inc. *General Sales Office*, Palmolive Bldg., Chicago 11, Illinois; *Executive Office*, Kaiser Bldg., Oakland 12, California.

P. S. And remember—Kaiser Aluminum Foil is unmatched for eye-appeal . . . sales appeal!



Stocking boxes laminated by:  
**Continental Can Company, Inc.**  
 Shellmar-Betner  
 Flexible Packaging Division  
 Mt. Vernon, Ohio



**the tough and the beautiful—**

## **laminated packages with Sparkling Celanese\* Acetate**



What a difference a transparent surface layer of Acetate film can make! Package colors come alive . . . printing and illustrations stand out sharp and clear. Even the simplest package bristles with eye-appeal . . . builds your prestige.

Your package has a longer shelf-life, too, with a thin layer of Celanese Acetate eliminating scuffing or worn edges. Your product name and slogan, covered with tough, but lustrous Celanese Acetate, enjoys maximum protection, lasting beauty.

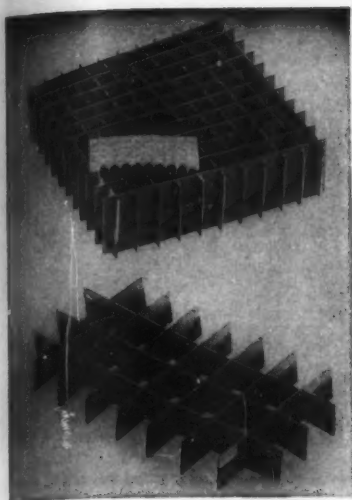
If desired, boxes may be die-cut before laminated to produce a window box effect for product visibility.

Ask your supplier about laminating your package with Celanese Acetate. You'll see how effective this single improvement can be. Celanese Corporation of America, Plastics Division, Dept. 108-B, 290 Ferry St., Newark 5, N. J. Canadian affiliate, Canadian Chemical Co., Limited, Montreal, Toronto and Vancouver.

\*Reg. U. S. Pat. Off.

**Celanese\***  
**packaging films**





PROTECT WITH **PARTITIONS!**  
Solve YOUR  
Internal Packaging Problems  
**SAFELY—SECURELY!**

Made to Your  
Exacting Specifications  
for Pharmaceuticals  
Candy  
Heart Box Inserts  
Collapsible Tubes  
Toys and other fragile items

Plain and Die Cut

Prompt Delivery

Write or Call for Complete Data

**RAPID CUTTING**  
**CO., INC.**

90-96 ENGERT AVE.  
BROOKLYN 22, N.Y.

Evergreen 8-2512-3-4

(Formerly at 169-173 Franklin Ave.)



## Plants and people

[Continued from page 167]

structures. Wraps, Inc., is headed by Edward M. Porter as president and George Rawak as vice president.

Dr. Kenneth C. Lyon, former chief of glass research for the Armstrong Cork Co., has been named manager of glass research and product development for Ball Bros. Co., Inc., Muncie, Ind. Dr. Lyon is a Fellow of the American Ceramic Society and a member of the Division of Chemistry and Chemical Technology, National Research Council. For 14

Lyon

years he was a member of the Testing Procedures Committee, Glass Container Mfrs. Institute, and for 10 years chairman of the Glass Committee, American Society for Testing Materials.

Phillips Chemical Co., wholly owned subsidiary of Phillips Petroleum Co., Bartlesville, Okla., is establishing a new district office of its plastics sales division at Akron, Ohio, with W. M. Larsen as manager. M. B. Bistline is now plastics sales engineer in New York.



Langsett

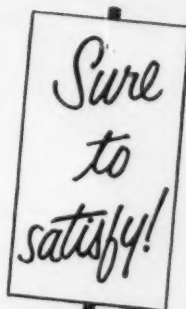
Robert C. Langsett has been named assistant to the manager of glass container sales for the Armstrong Cork Co.'s Glass and Closure Division, Lancaster, Pa. Mr. Langsett has been with Armstrong since 1947 and handled sales in Philadelphia and San Diego.

P. E. Bray has joined the Kraft Bag Corp., New York, as field engineer for the company's automatic bag-filling machine. Mr. Bray will also handle sales and service on multiwall bags in the Southeastern area. P. F. Finley has been appointed assistant sales manager for Kraft Bag in charge of multiwall bag sales in the Southeastern territory.

The Hudson Pulp & Paper Corp., New York, will go into the paper cup and container business this year as a major step in its long-range program of product diversification. The firm, which makes gummed sealing tape, multiwall bags and household napkins, will launch its Paper Cup & Container Division this summer and will manufacture cups for office and industrial use, carry-out cups for luncheonettes, vending-machine cups, ice-cream containers holding from 4 oz. to 1/2 gal., food containers for dairy products and pre-cooked and frozen foods, bulk containers for dairies and meat packers and cups for in-plant industrial feeding. A New York area plant on a nine-acre plot in Carteret, N. J., will be the basic pilot operation, with

## Seals·Labels·Tags by **CAMEO**

heat seal  
gummed  
pressure sensitive  
paper  
foil  
thermoplastic  
die cut  
embossed  
printed





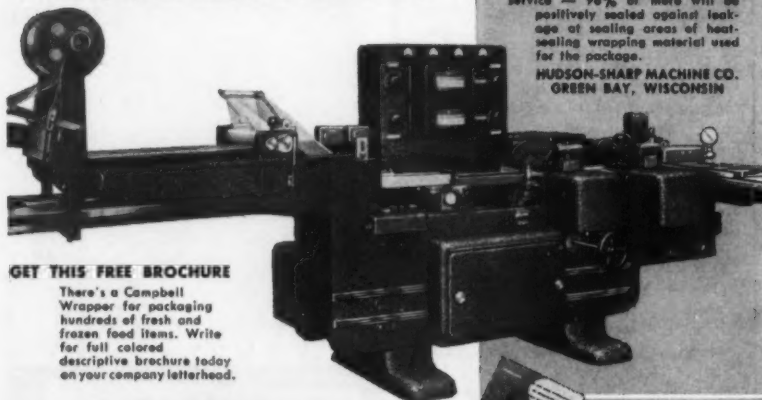
## CAMPBELL VACUUM PACK

MEAT AND FOOD WRAPPER  
PAYS FOR ITSELF IN LESS THAN  
SIX MONTHS TIME ON JUST  
MATERIAL & LABOR SAVINGS!

Fast, automatic  
CAMPBELL wrapper  
saves up to 60% on  
vacuum drawing packaging  
films and materials

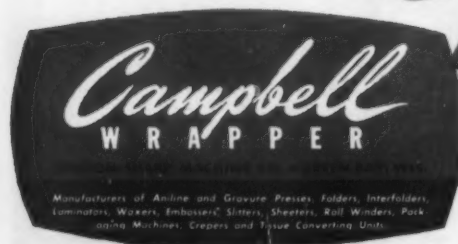
No question about it — the CAMPBELL Vacuum-Pak's simplified one person operation; its close-fitting vacuum drawn wrap which requires no trays or stiffeners, *unless desired* — ACTUALLY saves enough money on materials and labor alone over competitive methods to pay for itself in 4 to 6 months time! In addition, the product's tight wrap minimizes puncture risk and is vacuum guaranteed.

Used by America's leading packers, this ingenious automatic vacuum wrapper packages sliced luncheon meats, bacon, chops, patties, wieners, cheese and other food products with equal ease and speed. Simple adjustments require minimum down-time for product change-over. Get complete cost and production facts today.



### GET THIS FREE BROCHURE

There's a Campbell Wrapper for packaging hundreds of fresh and frozen food items. Write for full colored descriptive brochure today on your company letterhead.



### POSITIVE Guaranteed SEALING



- 98% of packages positively sealed and guaranteed.
- Vacuum drawn wrap eliminates shrinkage, flavor and color loss.
- Tremendous savings in wrap materials and labor.
- Delivers 40 to 70 Units per minute
- Extends product's shelf life—reduces spoilage and returns.
- Close wrap reduces puncture risk.

### Less than 2% package "Leakers"

It is hereby guaranteed that out of every 100 units Vacuum-packed on a CAMPBELL Vacuum Pack Meat and Food Wrapper in regular production service — 98% or more will be positively sealed against leakage at sealing areas of heat-sealing wrapping material used for the package.

HUDSON-SHARP MACHINE CO.  
GREEN BAY, WISCONSIN

### NEW... Campbell-Pak

Another first — converts roll stock to low cost filled and heat sealed bags for manual or automatic sequence packaging of liver, brains, kidneys, tongues, kraut, cheese and other products. Write for descriptive literature on this entirely new method packaging machine.

### Plants and people

additional points of production to be selected later. All products will bear the Hudson name and package designs by Royer & Rogers, industrial designers.

Anchor Hocking Glass Corp., Lancaster, Ohio, has announced the election of the following officers for the company's subsidiary, Carr-Lowrey Glass Co., and for Carr-Lowrey's subsidiary, Swindell Bros. Inc., both of Baltimore.



Funky

John H. Funky has been named president of Carr-Lowrey, filling the vacancy created by the death of George F. Lang. Mr. Funky has also been elected president and a director of Swindell Bros. C. R. Hilgenberg has been elected treasurer and continues as vice president and secretary of Carr-Lowrey. J. J. Jeffries, vice president and secretary of Swindell Bros., has been elected assistant treasurer of that company. W. J. Burt was elected assistant treasurer of Carr-Lowrey and continues as assistant secretary. Cyrus L. Fulton, a director and vice president in charge of finance for Anchor Hocking, has been elected a director in both Carr-Lowrey and Swindell Bros.

Dean C. Mathews, president of the Quality Park Box Co., has been elected executive vice president of the Quality Park Envelope Co. and the Century Envelope Co., all subsidiaries of Brown & Bigelow. William G. Jacobs has been elected vice president and Fred LaPlant assistant treasurer of the box company.



Huss

W. Sheridan Huss has been appointed president of Acme Steel Products Div., Acme Steel Co., Chicago. He succeeds John G. Bucuss, who has retired but will continue with the company in an advisory capacity.

Mr. Huss was formerly vice president and general manager of the division.

The American Box Board Co., Grand Rapids, Mich., plans to erect a new office building to house its executive and general office staff.

Ever Ready Label Corp., Belleville, N. J., has opened an office at 109 N. Dearborn St., Chicago, headed by Carl Manson.

The Hunter Douglas Aluminum Corp., New York, has completed plans to begin large-scale, mass production of seamless aluminum aerosol containers. The aerosol units will be produced in the company's Riverside, Calif., plant and in the new Hunter Douglas facility

*For Packaging in Glass look to*

# NATIONAL ASSOCIATION OF GLASS CONTAINER DISTRIBUTORS for SERVICE

The members of the National Association of Glass Container Distributors listed in this advertisement are all fully qualified, fully staffed distributors. Each of these firms is organized and managed with a unified purpose... to offer absolutely the best service available in the glass container field, no matter what the packaging problem or program might be.

Remember all N. A. G. C. D. members consistently offer a full inventory; yet varied to meet any demands.

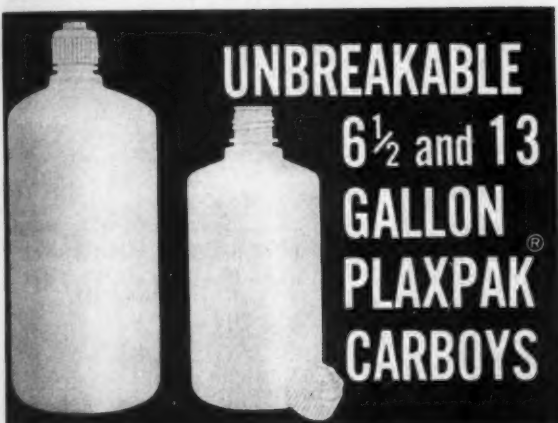
*Also, look to* NATIONAL ASSOCIATION  
OF GLASS CONTAINER DISTRIBUTORS *for*

KNOW-HOW

CONVENIENCE

## COAST-TO-COAST MEMBERS

ATLANTA, Georgia  
H. Smith Bottle Supply Co.  
BALTIMORE, Maryland  
Atlantic Glass Co.  
BOSTON, Mass.  
S. H. Ansell & Sons  
BOSTON, Mass.  
Roxbury Bottle Company  
BROOKLYN, N. Y.  
J. Rabinowitz & Sons, Inc.  
CHICAGO, Illinois  
W. Braun Co.  
CHICAGO, Illinois  
Continental Glass Company  
CLEVELAND, Ohio  
State Bottle Company  
CLEVELAND, Ohio  
L. S. Kaufman & Sons  
DETROIT, Michigan  
M. Jacob & Sons  
LONG ISLAND CITY, N. Y.  
United Bottle Supply Corp.  
LOS ANGELES, California  
California-Eureka Bottle Co.  
MIAMI, Florida  
Magic City Bottle & Supply  
MILWAUKEE, Wisconsin  
A. D. Braun Co.  
MINNEAPOLIS, Minn.  
Twin City Bottle Company  
MONTREAL, Canada  
Central Bottle Co.  
NEW YORK, N. Y.  
Jesse Lee Sales Co., Inc.  
PHILADELPHIA, Pa.  
Zuckerman-Honickman Inc.  
ST. LOUIS, Missouri  
Northwestern Bottle Co.  
TOLEDO, Ohio  
Lucas County Bottle Co.  
TORONTO, Canada  
Consolidated Bottle Co., Ltd.



# UNBREAKABLE

## 6 1/2 and 13 GALLON PLAXPAK CARBOYS

Bottles are Blow-Molded in ONE Piece of  
100%, High Molecular Weight Polyethylene

A light-weight, non-breakable bulk container to reduce shipping costs and make safer, easier handling of hazardous, costly, corrosive chemicals. Approved by ICC for acid shipments, including hydrofluoric acid up to 60% strength when packaged in ICC 1F Poly-ply jacketed carboy units.

Available for immediate delivery from our large warehouse stocks of jacketed and naked polyethylene carboys.

ADVANTAGES	
UNBREAKABLE	Longer life... Safer to handle... Economical.
SAFETY	Guards personnel and property from accidents and damage.
LIGHT WEIGHT	Lower shipping costs because less weight and cubic space... 55% less weight for empties and 20% less for full packages.
CHEMICALLY INERT	Suitable for shipping many corrosive liquids, such as hydrofluoric acid or caustic solutions... Excellent for handling or preservation of high purity distilled water, alcohol, aqueous and other solutions.
PACKING	6 1/2 gal.—6 bottles per carton. 13 gal.—4 bottles per carton. Also available in individual carton packing.

CONTACT US! We invite  
your inquiries.

J. RABINOWITZ & SONS, Inc.  
2 Hanson Place Brooklyn 17, N. Y.  
Telephone STerling 3-0300



## UNSCRAMBLER SPEEDS UP PRODUCTION

• Cartons or cases of bottles, jars, or cans dumped on table are instantly unscrambled and regimented into a single file to keep a continuous flow of units on your production line. Reduces labor costs... minimizes breakage... saves floor space... and meets all sanitary specifications as operator does not handle mouths of units.

### ARE YOU CHANGING TO GLASS?

Send for Bulletin ST-1 and learn why there are twice as many ISLAND Styl-O-Matic Unscramblers in use than all other makes combined, and how they are used to unscramble practically every type of container imaginable.

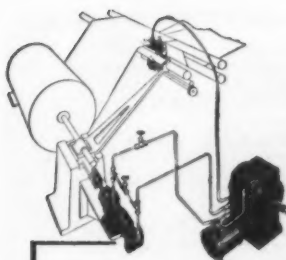
GET  
THE  
FACTS  
NOW!

ISLAND EQUIPMENT CORP.  
27-01 Bridge Plaza North  
Long Island City 1, N. Y.

Please send full details on the Styl-O-Matic  
Unscrambling Tables as described in Bulletin MP2.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_





## THREE from ONE **ASKANIA** Edge Position Control

**INCREASED PRODUCTION • IMPROVED QUALITY  
REDUCED COST**

• You need only one easy-to-install-and-maintain addition to new or existing equipment—the ASKANIA EDGE POSITION CONTROL—to achieve automatic cutting, slitting, marking and laminating. Continuous, accurate line production... maximum speed... minimum downtime... are among the specific results obtained from its use.

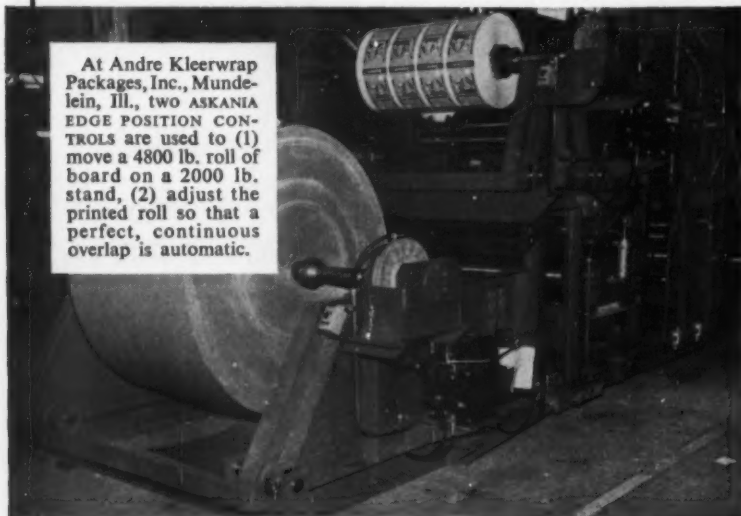
**ANY SIZE, SPEED OR MILL**—The ASKANIA EDGE POSITION CONTROL can be applied to any size web running at any rate of speed in any mill. Your own mill mechanic can INSTALL IT! The speed of your own equipment is the only limit to the amount of run-out it can correct. The precision with which LAMINATING and other operations are regulated is a major production factor. Perfect alignment at high speed results.

**HOW IT WORKS**—This control has a sensing nozzle, a jet pipe regulator and a hydraulic work cylinder. (1) The sensing nozzle measures web error of less than .005 inch. (2) The jet pipe regulator converts the small air pressure measurement provided by the sensing nozzle into a high level hydraulic force. (3) The work cylinder applies that force to the web under control. No contact is made with the moving web.

**CONTINUOUS CONTROL • HIGH SPEED OPERATION • NON-CONTACT  
HYDRAULIC OPERATION • MOST ACCURATE CONTROL • WIDE RANGE**

Send for Bulletin No. 161 and 166 for complete information.  
Write Askania Regulator Co., 254 East Ontario Street, Chicago, Illinois.

At Andre Kleerwrap Packages, Inc., Mundelein, Ill., two ASKANIA EDGE POSITION CONTROLS are used to (1) move a 4800 lb. roll of board on a 2000 lb. stand, (2) adjust the printed roll so that a perfect, continuous overlap is automatic.



## **ASKANIA** REGULATOR COMPANY

"CONTROLS FOR INDUSTRY"

HYDRAULIC, ELECTRONIC CONTROLS & SERVOS, GENERAL SYSTEMS,  
ENGINEERING & COMPUTER SERVICE, VALVE ACTUATORS & CYLINDERS

A Subsidiary of General Precision Equipment Corporation

### Plants and people

at Flemington, N. J. Production is expected to start during the first half of this year. Plans call for greatly improved four-color printing equipment.

Nashua Corp., Nashua, N. H., has realigned its Flocking, Gunning and Coating Divisions into two new sales



Sanborn Doane

divisions, the Merchant and the Converter Sales divisions. The Merchant Sales Division, under the direction of Austin W. Sanborn, will handle sales of Pervenac and Imac heat-seal papers, metal-coated papers, Davac gummed label paper, velour and other printing papers for distribution through paper merchants. Under Carl E. Doane, sales manager, the Converter Sales Division will sell gummed and heat-seal tapes, box cover papers and gummed specialties to box makers and other paper converting industries. Robert F. Wheeler is assistant to Mr. Sanborn; George A. Richmond and Arthur T. Stevens are assistants to Mr. Doane.



Heller

Melvin Heller has been appointed manager of the newly created frozen food and poultry packaging division of Milprint, Inc., Milwaukee, Wis. Previous to this assignment, Mr. Heller had been associated for some time with Milprint's meat division.

Alfred M. Blakesley has been appointed sales manager of the Container Div., Atlas Plywood Corp., Boston.

Gerald G. Foster has been named manager of the new Los Angeles plant of G. Barr & Co., Chicago aerosol manufacturer. The new plant is located at 850 E. 62 St.

Marion M. Caskie, executive vice president of the Reynolds Metals Co., Richmond, Va., has retired under the company's retirement plan. He will continue on the board of directors and will be retained by the company as a consultant.

The Simon Adhesive Products Corp. has moved into a new modern plant at 35-02 48 Ave., Long Island City 1, N. Y. New, up-to-date processing equipment has been installed and the technical department has been expanded.

James Maher has been appointed assistant sales manager of the Paraffined Carton Division, Container Corp. of America, Chicago. Glenn J. Branden-



TOO

MANY

PARTS

SPOIL

THE

MACHINE

**mrmm****FILLING and LABELING MACHINES**  
*are Simple in Design**No skilled help necessary to operate or maintain!!***FULLY AUTOMATIC ROTARY**  
• Vacuum • Gravity • Volumetric  
**LIQUID FILLING MACHINES**

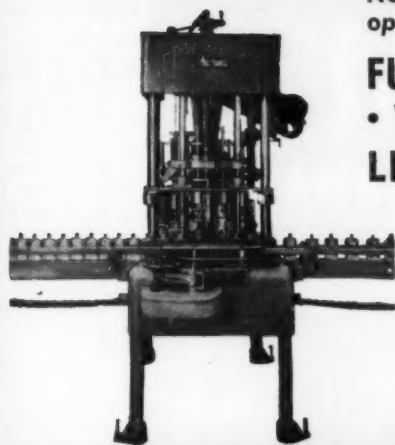
Designed for quick changeover and thorough cleaning. Fills all types of foamy and still liquids—brines, vinegars, chemicals, drugs, perfumes, syrups, cosmetics, etc. All sizes and shapes of metal, plastic and glass containers from 1/4 ounce to 5 gallons.

Standard machines available from 8 to 40 spouts. Special machines designed and built to meet your requirements.

Write Dept. MP-2 for literature on MRM Fillers and Labelers

**mrmm company, inc.** 191 BERRY STREET, BROOKLYN 11, N. Y.

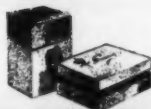
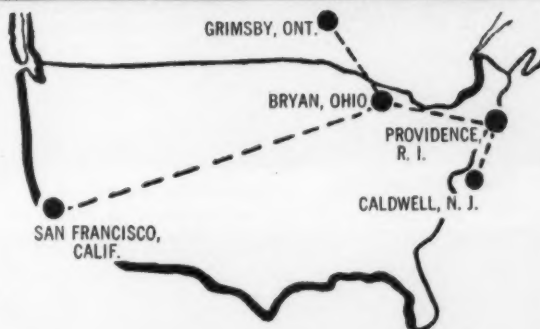
Manufacturers of a complete line of fully automatic and semi-automatic filling equipment and fully automatic labeling machines.



...For \$64,000.

**Who Makes  
Packaging's  
Finest  
Colored Flock?"****"CLAREMONT"****AND RIGHT HE IS!**

Upon request, we will be very glad to promptly furnish you with an experimental, workable quantity of Claremont Flock... together with color cards, detailed information and prices.

**CLAREMONT WASTE MANUFACTURING COMPANY**  
The Country's Largest Manufacturer of FLOCK  
CLAREMONT, NEW HAMPSHIRE**5 CONVENIENT SPOTS**  
for obtaining engraving rubber**and refrigerated molded rubber IN A HURRY**

"U. S." grows its own natural rubber and makes its own synthetic rubber. "U. S." has the vast resources, the experience and the technical staffs essential in producing the best in rubber for printing plates. For always fresh rubber, call our distributor, Williamson & Co., at any of the following refrigerated stocking plants:

Caldwell, New Jersey • Bryan, Ohio  
San Francisco, Calif. • Grimsby, Ont.  
or contact our Providence, R. I., plant.

**Mechanical Goods Division****United States Rubber**

# Repeat Orders

*Are the Best Proof of*

# CaPeM's

## EFFICIENT PERFORMANCE



\* These eight packaging lines in the Wildroot Plant in Buffalo, N. Y. have a combined capacity of approximately 1000 bottles per minute. The Wildroot Company, manufacturers of famous Wildroot Shampoo and allied products, have long been users of CaPeM screw cappers. The efficient performance turned in by earlier CaPeM machines was the determining factor in their selection when Wildroot recently equipped a new plant.

CaPeM Screw Cappers handle all types of metal and plastic caps and are fully automatic. They operate on jars, cans, bottles and jugs ranging in size from 1 oz. to gallons. Speeds range from 40 to 300 containers per minute.

For complete information on CaPeM Screw Cappers, or other packaging equipment, write Sales Manager, Consolidated Packaging Machinery Corp., Buffalo 13, N. Y.

### CaPeM SCREW CAPPERS

**CONSOLIDATED PACKAGING MACHINERY CORP.**

1400 West Ave., Buffalo 13, N. Y.

#### Plants and people

burg has been named staff assistant to W. D. Kellogg, sales manager of that division. R. K. McGinnis has been assigned to the Michigan and northwest Ohio territory, with offices in Detroit. R. W. Ryan has been appointed a packaging engineer at the company's 35th St., plant in Chicago.

Name of the Lewis Container Co. has been changed to American Box Board Co., Inc., and the new container plant being completed in Madison, Wis., will be a branch plant of the company's facilities. Officers and directors of the firm remain the same. Robert K. Stolz, Jr., is manager of the new plant.

Cheslam Corp., Yonkers, N. Y., has appointed Eric A. Timm as Midwest sales representative for Cellothene and other Cheslam custom laminates.

The Warner Electric Brake & Clutch Co., Beloit, Wis., will complete a second manufacturing plant, to cost \$1 million, just outside Beloit by mid-1956.

The Bowater Corp. Ltd., London, has announced that A. B. Meyer, head of sales in North America, and H. M. S. Lewin, chief of Newfoundland operations, have been appointed full members of the company's board of directors.

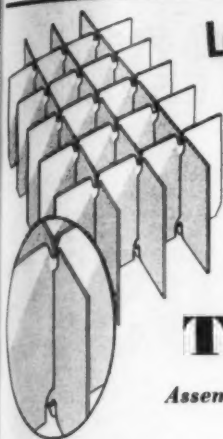
Roe S. Clark, president of the Package Machinery Co., East Longmeadow,



Clark Mass., died at his home in Springfield on Dec. 22. He was also board chairman of Reed-Prentice Corp., a wholly owned subsidiary of Package Machinery. Mr. Clarke joined Package Machinery in 1916 as a factory accountant. As an industrial, financial and civic leader in the greater Springfield, Mass., area, Mr. Clark held executive titles in more than 20 different industrial, financial, educational and civic organizations.

Joseph H. Holmquist, technical assistant to the director of customer research for Continental Can Co., New York, died on Dec. 17 after a prolonged illness. He was 50 years old. Mr. Holmquist, well known in the food canning industry for the past 25 years, was the holder of several patents concerning canning equipment and methods, and the author of many scientific articles.

Frank A. Kleiler, for many years chief plant engineer of the Milwaukee, Wis., plant of Cornell Paperboard Products Co., died on Nov. 26 at the age of 71. Mr. Kleiler had retired on Jan. 1, 1955, after 42 years with the company.



Lower "Per Unit" Cost



when you use

**TWIN-LOK**

Assembled Self-Locking Partitions

TWIN-LOK partitions provide precision alignment . . . combination top and bottom lock assures that each section is held exactly in the same position.

Rugged construction and extra rigid design for maximum protection. Requires minimum storage space. Made of finest quality hard-sized container chip—prevents label scuffing. Shipped pre-assembled and ready for use . . . reduces labor costs in handling.

WRITE FOR QUOTATIONS

**Fibre Partitions, Inc.**

2300 South Adams

PEORIA, ILLINOIS

WHEREVER SOMETHING  
**STICKS**

Modern Packaging-Engineers Use

**SILICONE  
FLUID SPRAY**



WHEREVER ANYTHING STICKS TO METAL SURFACES—ON FILM SEALERS, CRIMPER JAWS, EMBOSsing ROLLS, PANS, STAMPING, FORMING DIES—MOLDS OF ALL KINDS

SIMPLY SPRAY ON THIS PURE  
SILICONE FLUID COATING

And your sticking problems are over!

The most economical way to apply  
costly Silicone Release Agents!

SAFE — NON-TOXIC  
CLEAN — LONG LASTING

Handy Self Dispensing Can  
Has No-Fumble, Speedy Spray Head



PRICES (Delivered)

Sample Can.....\$2.00

Per Unbroken Dozen.....\$18.00

Per Unbroken Gross.....\$197.40

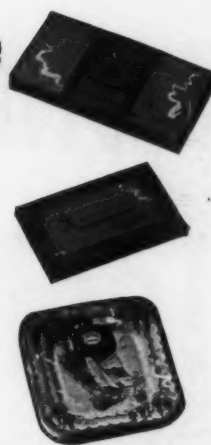
INJECTION MOLDERS SUPPLY CO.

3514 LEE RD CLEVELAND 20, O

One operator and the  
versatile

**"OLIVER"**

can wrap and label  
your products  
to sell and save!

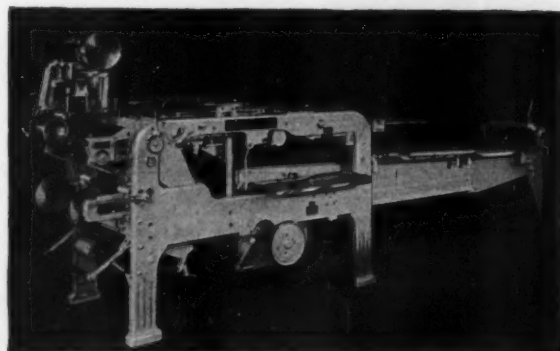
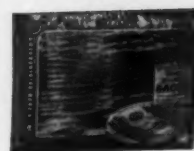


"Oliver" Wrappers handle widest range of packages

"Oliver" quick adjustability saves dollars every day

"Oliver" Labeling System simplifies your production

Paper specialties, textiles, baked goods, meats, and products only remotely similar . . . the Oliver wraps them securely, neatly, rapidly. Using modern packaging materials it heat-or glue-seals your package for utmost protection. A smart diecut label can be heat-sealed to the package. The quick-adjustability of the Oliver keeps the unit cost low. Each of 7 models handles packages in a wide range of sizes at speeds up to 50 a minute. Printed wrappers are registered by an electric eye. The many Oliver features—plus the Roll-Type Labeling System—save you dollars every day. Write now for complete details.



**"Oliver" Wrapping Machine**

with Automatic Roll-Type Labeling System

OLIVER MACHINERY COMPANY GRAND RAPIDS 2, MICH.

# Bundling in reduces costs.





# in Du Pont cellophane ts... increases sales!







"We decided to bundle Gelusil\* in Du Pont cellophane in order to reduce packaging costs. Our operation has proved extremely successful," reports Warner-Chilcott Laboratories, New Jersey.

Warner-Chilcott is but one of the many firms who have profited from bundling in cellophane—not only in reduced costs but for many of these additional reasons as well:

1. Bundling in cellophane lowers packaging costs as much as 25%.
2. It makes the unit of sale self-displaying—permits instant identification of brand, type or flavor, size of package.
3. It eliminates the need for paperboard boxes.
4. It reduces shipping costs.
5. It cuts handling problems and costs—jobbers like it.
6. It gives extra protection to product flavor and freshness.
7. It discourages pilferage of individual packages.
8. It keeps all packages clean and sparkling.

It will pay you to investigate the extra economy, convenience, and display value that cellophane bundling can bring your product.

#### ONLY DU PONT OFFERS YOU ALL THESE PACKAGING ADVANTAGES

Over 100 varieties of film  technical  
experts to advise you  consumer buying  
studies to guide you  powerful national  
advertising  to back you.

\*Registered trademark



REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY

## DU PONT PACKAGING FILMS

CELLOPHANE • ACETATE FILM  
"MYLAR" POLYESTER FILM

## For your information

The 1956 edition of the "Engineers' Job Directory" (Decision, Inc., 1483 First National Bank Bldg., Cincinnati 2, Ohio; \$3.25) is now available. The book lists requirements of 236 major firms seeking qualified personnel in such fields as production, industrial, process and methods engineering. The 88-page book should be of value to engineers specializing in various phases of packaging.

A completely new 1956 Reference Guide to Dow Corning silicone products has just been published. The new edition describes almost 150 of the most generally used silicone products, 18 of which were introduced within the last year. The 12-page book is two-color printed and fully illustrated with charts, tables, graphs and application photographs. Copies may be had on request to Dow Corning Corp., Midland, Mich.

The American Rack Merchandisers Institute published this year the largest buyers' guide and directory in its history. The 100-page booklet lists the names of ARMI members attending the Institute's fifth anniversary national convention and gives details on participation by ARMI associate members in the National Housewares Show and the Independent Housewares Show.

Du Pont's Film Department has issued a new booklet showing latest commercial uses and detailed physical and chemical properties of "Mylar" polyester film. The booklet contains numerous photographs and charts, and cites examples of industries where this film has now become a preferred material. An easy-to-read chart details the characteristics of Mylar which have permitted design improvements and cost reductions in many uses and a complete table lists all available types and gauges of Mylar. Copies of Booklet MB-4 are available from the Du Pont Film Dept., Wilmington 98, Del.

A new 25-min. sound film, "Tape It Easy," is being made available nationally by Minnesota Mining & Mfg. Co., St. Paul, Minn. The 16-mm. color film—showing various manual, semi-automatic and automatic taping machines in action—is designed to acquaint industry with time- and labor-saving advantages of tape automation. The free film is available for viewing through local "Scotch" brand tape distributors or from any 3M branch sales office.

The book, "Designing for People," by Henry Dreyfuss (Simon & Schuster, New York), telling of the influence of the industrial designer on the development of packaging, distributing and selling American products, is to be published in several foreign-language versions and a new United States edition is

being planned. Popularity of the book is reported to be pushing it toward best-seller lists.

The American Institute of Management certified 13 companies in the packaging field as "Excellently Managed." They are: Anchor-Hocking Corp., Armstrong Cork Co., Container Corp. of America, Corning Glass Works, Hazel-Atlas Co., Hinde & Dauch Paper Co. of Canada, Ltd., International Paper Co., Libbey-Owens-Ford Glass Co., Owens-Illinois Glass Co., St. Regis Paper Co., American Can Co., Continental Can Co., Inland Container Corp. This places them among the 408 American and Canadian companies so cited for 1955 and listed in the Institute's yearly "Manual of Excellent Managements." Copies of the manual are obtainable from the American Institute of Management, 125 E. 38 St., New York 16.

The annual meeting of the National Assn. of Glass Container Distributors is scheduled for March 10-11, Warwick Hotel, New York.

Outstanding feature of Canada's 1956 National Packaging Convention, to be held in Toronto March 5-7, will be the award presentations and display of entries in three national competitions: the 1956 Canadian Consumer Package Competition, the 1956 Canadian Industrial Container Competition and the 1956 Canadian Point-of-Purchase Advertising Competition. All entries will be on display in the PAC Hall of Fame, King Edward Hotel, during the three-day convention. Awards in the consumer and industrial package competitions will be made at the association's Awards Dinner, Albany Club, Toronto, March 5. The point-of-purchase awards will be made during the Canadian Point-of-Purchase Advertising Forum on March 7. This is the first time that the three competitions have been held concurrently.

The American Society of Mechanical Engineers' machine design division is sponsoring a four-day conference to study industry's problems in design engineering. The conference will be held at the Convention Hall, Philadelphia, May 14-17, concurrently with the First Design Engineering Show. Advance registration cards for the show and information concerning the conference may be obtained either from A.S.M.E. or from Clapp & Pollak, Inc., exposition management firm, 341 Madison Ave., New York.

Technical problems involved in the extrusion coating of paper and other materials with polyethylene were discussed at a recent meeting of the Polyethylene

Extrusion Coaters Group and representatives of E. I. du Pont de Nemours & Co., Inc. The Polyethylene Extrusion Coaters Group, formed some 15 months ago under the auspices of the Specialty Paper and Board Affiliates, is made up of representatives of leading paper mills and paper converters engaged in polyethylene extrusion coating, for the purpose of discussing problems of mutual interest in that field. Highlighting the meeting were talks by several DuPont representatives. Group headquarters are at 122 E. 42 St., New York.

Raymond Stevens, senior vice president of Arthur D. Little, Inc., Cambridge, Mass., has been chosen to receive The American Institute of Chemists' 1956 Gold Medal. The award is in recognition of Mr. Stevens' "contributions to the wider understanding of essential procedures for the management and operation of industrial research." Presentation of the Gold Medal will be made to Mr. Stevens during the annual meeting of the Institute, to be held May 9-11 at the Hotel Statler in Boston.

Advance inquiries already received concerning the 6th Western Packaging &

### What's doing

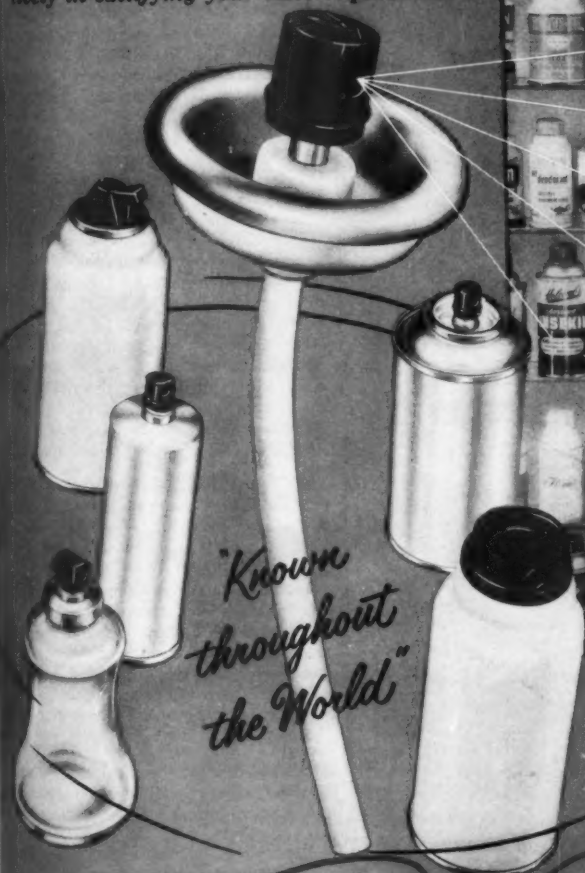
- Feb. 10-12—Institute of the American Poultry Industry, convention, Municipal Auditorium, Kansas City.
- Feb. 14-16—Sales Promotion Show, Municipal Auditorium, Miami, Fla.
- Feb. 18-26—International Food Show, Wanamaker's, New York.
- Feb. 29-Mar. 2—Western Candy Conference & Exposition, Sheraton-Palace, San Francisco.
- Mar. 5-7—Packaging Assn. of Canada, National Packaging Convention, King Edward Hotel, Toronto.
- Mar. 5-8—American Society of Bakery Engineers, convention, Edgewater Beach, Chicago.
- Mar. 5-9—National American Wholesale Grocers Assn., Palmer House, Chicago.
- Mar. 10-11—National Assn. of Glass Container Distributors, annual meeting, Warwick Hotel, New York.
- Mar. 11-15—Folding Paper Box Assn. of America, convention, Fairmont Hotel, San Francisco.
- Mar. 14-16—Assn. of National Advertisers, Inc., convention, Homestead, Hot Springs, Va.
- Mar. 15-16—International Symposium on Physics in Food Industry, convention, Plaza, San Antonio, Tex.
- Mar. 26-28—American Management Assn., Special Manufacturing Conference, Statler, Detroit.

# Aerosol Valve FOR YOUR PRODUCT by Precision

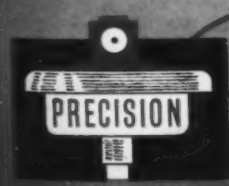
The picture tells a story... the story of overwhelming popularity, tremendous growth and continued reliance on a quality product... **PRECISION VALVE.**

The use of over 200,000,000 time-tested valves by hundreds of completely satisfied customers throughout the world, is your assurance that **PRECISION** has the answer to your aerosol program regardless of product or container.

We invite your inquiry to enable our staff of aerosol valve technicians to work cooperatively in satisfying your valve requirements.



*Known  
throughout  
the World™*



## Precision Valve Corporation

700 NEPPERHAN AVENUE • YONKERS 3, NEW YORK



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## FUNCTIONAL

FOR CONVERTERS AND DIRECT USERS

## MATERIALS

with  
Protective Do-the-Job  
Properties

as a result of  
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building barrier constructions  
H. P. Smith knows the needs  
of those who convert  
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Properties as: Wet-Strength; Greaseproofness;  
Moldability; Waterproofness; Gas, Vapor,  
Odor, Chemical Resistance; Heat-  
Sealability . . . or any combination . . .  
HPS is equipped and qualified to produce  
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PLASTIC COATING • LAMINATING • OILING • WAXING • REINFORCING

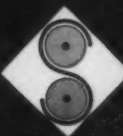
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Experience to work for you when you need  
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## For your information

Materials Handling Exposition, to be held at the Pan Pacific Auditorium in Los Angeles, July 10-12, indicate that attendance will far exceed last year's record attendance of almost 10,000. The Exposition is under the management of Clapp & Poliak, Inc., New York exposition management firm.

Eight papers were given by leading scientists, both in and out of the industry, at the recent mid-winter meeting of the Scientific Section of The Toilet Goods Assn. The meeting, conducted by Dr. Dan Dahl and T.G.A. president, John A. Ewald, was attended by about 500 persons, the largest meeting of the section thus far.

A Work Simplification Trainer's Institute has been arranged for member companies of the Folding Paper Box Assn. of America. Sponsored by the association's Research and Technical Committee, the Institute will be conducted by Allan H. Mogensen, director of Work Simplification Conferences, at his Lake Placid, N. Y., headquarters from Feb. 13-24. Twenty box-company representatives will be able to attend the intensive series of 40 lectures.

William D. Hall was named director of the Stock Box Committee of the Folding Paper Box Assn. Mr. Hall is also director of research for the association. The Stock Box Committee is currently engaged in a series of projects designed to provide additional statistical data on sales and use of stock boxes and to determine methods for making stock boxes better to serve the retailer.

The 34th Annual of Advertising, Editorial Art and Design (Farrar, Straus & Cudahy, Inc., 101 Fifth Ave., New York 3; \$12.50), publication of the Art Directors Club of New York, is now available. This well-designed and beautifully printed book records the best in advertising and editorial art and design, and reproduces the top achievements in these fields for 1955. Included in the publication is a full-page illustration of MODERN PACKAGING's award-winning February, 1955, cover.

Milk will be featured during 1956 in the long-range advertising and promotion program of the Glass Container Mfrs. Institute, Inc. The program will include full-page, four-color advertisements in *Ladies' Home Journal*, *Good Housekeeping*, *McCall's*, *Woman's Day* and *Family Circle*. The campaign will emphasize the benefits of buying foods and beverages packed in glass and an educational film strip will be made for use in high schools. GCMI reports increased shipments of all major grades of glass containers in 1955 over the 1954 level. Estimated total glass-container shipments for 1955 were placed at





**CLOSURES**  
give  
**PAN-AM**  
**safe packaging**



**Tri-Sure Closures add sales features  
to Panalube's utility cans**

Customers like Panalube's utility cans, because they are equipped with Tri-Sure's\* popular utility closures which make pouring easy—and make the can easy to clean and re-use.

\*The "Tri-Sure" Trademark is a mark of reliability backed by over 35 years serving industry.

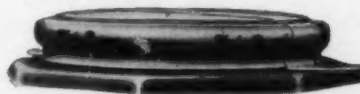


**Tri-Sure Closures protect Panalube drums  
from leakage and losses**

One of the best heavy-duty motor oils is *Panalube*—made especially for trucks, tractors, busses and other equipment operating under severe conditions.

Panalube is shipped to all parts of the world by Pan-Am Southern Corporation, of New Orleans.

Pan-Am equips every drum with Tri-Sure Closures because experience has proved that the exclusive Tri-Sure assembly is the *best protection* for their products.



**The Sign of a Perfect Seal**

When you order drums, pails or cans, *play safe* with your product's security by specifying "Tri-Sure Closures."

AMERICAN FLANGE & MANUFACTURING CO. INC., 30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

CHICAGO, ILL. • NILES, OHIO • LINDEN, N. J.

Tri-Sure Products Limited, St. Catharines, Ontario, Canada

Tri-Sure S/A Indústria e Comércio, São Paulo, Brazil

B. Van Leer N. V., Stadhouderskade 6, Amsterdam, Holland

Van Leer Industries, Ltd., Seymour House, 17 Waterloo Place, Pall Mall S.W. 1. London, England

**IF ...  
costs  
are  
considered**

**your next  
machine**

**will be a ... BELL·pak**



#### INITIAL INVESTMENT

A Bell-Pak Machine requires substantially **LESS INVESTMENT** than any other high speed flexible packaging machine.

#### COST PER UNIT

Ability to package two, three, and four units *simultaneously* at high production speeds slices per unit costs to a minimum.

#### EFFICIENCY

Different items . . . in the same or different-sized packages . . . can be filled *simultaneously* within an accuracy of plus or minus 1%.

#### VERSATILITY

Solids, semi-solids, liquids, powders utilizing film, foil or any laminated heat seal material can all be packaged on a single Bell-Pak Machine.

**BELL-PAK,  
flexible packaging for  
SOLIDS  
LIQUIDS  
POWDERS**

Send us a sample of your product, your package, your problem. Your costs, your package, your speeds will be demonstrated on an actual "production run" of the Bell-Pak Machine. Address



**BELL·pak**



A DIVISION OF  
**THE BELL MACHINE COMPANY**  
*Designers and Builders of Precision Machinery since 1907*  
OSHKOSH, WISCONSIN

#### For your information

134,000,000 gross, an increase of 7% over the previous year's shipments.

The National Fibre Can & Tube Assn., in a year-end forecast, predicts an 8% increase in public consumption of fibre cans and tubes during the first half of 1956. Total dollar sales, including Governmental, were estimated to exceed \$115 million for the year. The association is actively engaged in a research study on a multiplicity of packaged items in preparation to meet a public demand for simpler, less expensive and more beneficial forms of packaging.

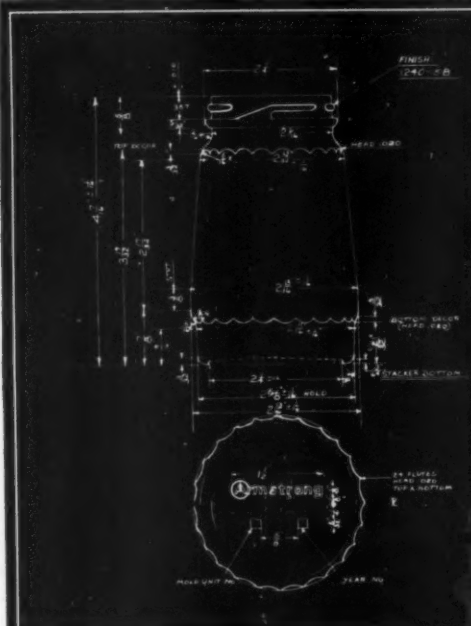
A new specification, covering pressure-sensitive packaging and sealing tapes, Federal Specification PPP-T-0060, has been issued. It incorporates the technical advances made in the tape industry over the past seven years. The previous specification for packaging—JAN-P-127, last revision 1948—has not been withdrawn. Procurement under the new specification is permitted on JAN-P-127 contracts.

More than 75% of the exhibit space for the 6th Western Packaging & Materials Handling Exposition, scheduled for July 10-12 at the Pan Pacific Auditorium in Los Angeles, had already been sold by the beginning of January. According to Clapp & Poliak, Inc., producers of the exposition, this is a level that is not ordinarily reached until May for a show to be held in July.

The Education Department of the National Assn. of Mfrs. has published a booklet, titled "Tomorrow's Scientists and Engineers," based on an extensive study by the association's Research Committee to determine how the critical shortage of scientists and engineers in the United States can be improved. The study reveals that the deficiency in scientists originates in the secondary schools. Specific suggestions on how companies can help correct the shortage are contained in the booklet, which is available on request to the National Assn. of Mfrs., Research Committee, 2 E. 48 St., New York 17.

The Quartermaster Food & Container Institute for the Armed Forces, Advisory Board on QM Research and Development, Committee on Foods, has published a booklet, "Precooked Frozen Foods," containing the proceedings of a symposium sponsored by the Institute last year and attended by research workers from universities, Government and industry. Subjects covered pre-cooked frozen foods in use by the Services, their preparation and processing, quality control and stability, and microbiological aspects. Copies of the publication may be obtained on request to the Quartermaster Food & Container Institute for the Armed Forces, 1819 Pershing Rd., Chicago 9.

# Design ideas produce ideal supermarket jar



MAIN OFFICE LANCASTER, PA.		<b>Armstrong Cork Company</b>		FACTORY MILLSBORO, DE.	
GLASS AND CLOSURE DIVISION GLASS CONTAINER DEPARTMENT					
GLASS CONTAINER SPECIFICATIONS					
CUSTOMER'S NAME					
ADDRESS					
MOLD NUMBER	SIZE	STYLE			
1240-58	7.6 oz	Jelly Jar			
CAPACITY	MINIMUM	MEAN	MAXIMUM		REVISIONS
		9.0 oz			
WEIGHT	ADJUST FOR CAPACITY	7.62	ADJUST FOR CAPACITY		
			8.0 oz		
FILLING POINT ABOVE BASE	0" FLOW				
CORK FINISH					
CAP FINISH	1240-58				
FILLING TUBE DIAMETER	COLOR FLINT				
FLEX MODEL NO. 2457					



1. Decorations add good looks
2. Taper makes label easy to read
3. Recessed bottom stacks well

When she walks down the supermarket aisle, Mrs. Shopper is going to spot this preserves jar. The scalloped borders reflect sparkling high lights through the product. The tapered sides tilt the label upward, so it can be easily read. And the large over-all appearance of the jar makes it look like a lot for the money.

The packer likes its broad base and wide finish, while the supermarkets like the convenience of the stacker bottom.

There are many features that can be designed into containers, and perhaps some of them could produce an even better package for your product. Let's get together on it. Give your Armstrong man a call or write Armstrong Cork Company, Glass and Closure Division, 5402 Crystal Street, Lancaster, Pennsylvania.

**Armstrong GLASS CONTAINERS** *glass that performs . . . packages that sell*





It won't be long before Gaylord boxes on remote conveyor lines are monitored by versatile industrial television.

## WELL-BEHAVED BOXES...



*...are vital to modern, mechanized handling methods. As operations become more automatic, interruptions are more costly. Precision-built Gaylord containers are dimensionally accurate and structurally strong to speed packing and handling...prevent jam-ups.*

*Gaylord container specialists will be glad to work with you in selecting or developing "well-behaved boxes"... for maximum manpower-saving efficiency. Call your nearby Gaylord office.*

CORRUGATED AND SOLID FIBRE BOXES • FOLDING CARTONS • KRAFT PAPER AND SPECIALTIES • KRAFT BAGS AND SACKS

**GAYLORD CONTAINER CORPORATION • ST. LOUIS**

DIVISION OF CROWN ZELLERBACH CORPORATION



- ① SELECT the items you want
- ② CIRCLE the corresponding numbers on the post card
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## HELPFUL LITERATURE

**FREE**

There is valuable data — worth dollars and cents to you — in the literature and samples described below.

### EQUIPMENT • SUPPLIES • SERVICES

**AUTOMATIC AND SEMI-AUTOMATIC PACKAGING MACHINERY.** Illustrated brochure describes a line of packaging equipment that includes automatic unit packagers for feeding, filling, forming and sealing small products in heat-sealed packages; also shows heat sealing crimpers. Wrap-ade Machine Company, Inc. (B-651)

**MANUAL OF PLIOFILM USES.** 23-page manual contains "Pliofilm" properties chart, and gives detailed recommendations on how to use company's line of 13 grades of "Pliofilm." Goodyear Tire & Rubber Company, Inc. (B-652)

**BAG FILLING.** Complete description and specifications of hand-fed filling machines for bagging textile products, produce, and other items. Designed for use with plastic, paper, or combination bags. Tele-Sonic Packaging Corporation. (B-653)

**LABELING MACHINES.** Booklet offers specifications and gives operational details of an automatic labeling unit that can be adapted to the labeling of jars, bottles, cans and boxes. Unit will also do two- and three-sided labeling and fancy panel labeling. Alfred Hofmann & Company. (B-654)

**CARTON UNLOADER.** Illustrated folder gives specifications and describes operation of "Styl-O-Vac" fully automatic carton unloader. Unloads most shapes and sizes of glass containers at a rate of six to twelve cartons per minute. Island Equipment Corporation. (B-655)

**PRESSURE SENSITIVE LABELS.** Illustrated folder presents eight case histories of labels developed and produced by this company; also presents many samples of actual labels. Ever Ready Label Corporation. (B-656)

**VALVE BAG PACKER AND SETTLER.** Illustrated folder describes "Black Diamond" automatic controlled weight valve bag packer and settler, designed to automatically fill granular and powdered free-flowing materials into valve bags, in quantities of from 25 to 125 pounds, packed weight. Black Products Company. (B-657)

**PADDED SHIPPING BAGS.** Illustrated folder describes many case histories of uses for "Jiffy" padded shipping bags with built-in cushioning, designed for packaging of non-fragile, semi-fragile and soft items. Jiffy Manufacturing Company. (B-658)

**PACKAGING IRREGULARLY SHAPED PRODUCTS.** Illustrated folder describes the "Twistite/Shrinkwrap Method" and equipment for packaging food items and other irregularly shaped products in skin-tight packages at production speeds up to 1000 packages per hour. Amsco Packaging Machinery, Inc. (B-659)

**HOW TO SHIP HEAVY PRODUCTS IN CORRUGATED SHIPPING BOXES.** 24-page booklet describes and illustrates corrugated boxes suitable for products in a variety of shapes and sizes, and describes many actual applications. Hinde & Dauch. (B-660)

**AUTOMATIC TYING MACHINE.** Illustrated folder describes and gives specifications of machine that automatically twine-wraps packages and seals the ends with a metal seal. L. F. Fales Machine Company. (B-661)

**ELECTRONIC PACKAGE SEALER.** 14-page illustrated booklet gives specifications of a line of electronic heat sealers, including a sealer especially designed for heat-sealable packages. Kabar Manufacturing Corporation. (B-662)

**RUBBER PLATE PRINTING CYLINDERS.** Illustrated brochure provides detailed description of "D-Mount" plate cylinders for rubber plate printers; available in two types for presses up to 33 inches wide or over 33 inches. Mosstype Roller Company, Inc. (B-663)

**CATALOG OF MARKING EQUIPMENT.** 24-page illustrated catalog describes line of marking equipment that includes a conveyor line package marker, a multiwall bag printer, and a printer for corrugated and fibre shipping cases. Industrial Marking Equipment Co., Inc. (B-664)

**ENVELOPES AS CONTAINERS.** Illustrated booklet shows how envelopes are used as containers for a variety of "hard to package" products. Also describes twelve basic styles available. United States Envelope Company. (B-665)

**CLEAR PLASTIC BOXES.** Catalog folder illustrates and describes an extensive line of clear, rigid plastic boxes available in a variety of shapes and sizes for many packaging applications. Tri-State Plastic Molding Company. (B-666)

**BOTTLE LABELING MACHINES.** Illustrated brochure describes operation and gives floor plan of "Direc-Transfer" line of labeling machines for automatic bottle labeling at speeds up to 120 per minute. Pneumatic Scale Corporation, Ltd. (B-667)

**FILLING, PACKAGING AND WEIGHING MACHINES.** Illustrated brochure describes machines for tube, jar and/or bottle filling, bag closing and sealing, carton or bag making, and net or gross weighers. Arenco Machine Company. (B-668)

**WEB UNWIND STAND.** Illustrated folder describes, shows floor plan of air operated unwind stand, designed to provide extreme accuracy in web guiding and close tension control; permits processing speeds in excess of 1,000 ft./minute. John Dusenberry Co., Inc. (B-669)

**FLEXOGRAPHIC PRINTING PRESSES.** Illustrated literature describes in detail a line of single- and multi-color aniline printing presses, adaptable for use with either web or sheet stock. Fischer & Krecke. (B-670)

**ADHESIVES FOR PACKAGES.** Brochure describes the characteristics, physical properties, and applications of "Darex" Resin Adhesives, designed for packaging applications. 13 types and their uses are described. Dewey & Almy Chemical Company. (B-671)

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## EQUIPMENT • SUPPLIES • SERVICES

**COUNTING BY WEIGHT.** Illustrated folder describes many models of scales that count uniform parts quickly by a weight/ratio method. Toledo Scale Company. (B-672)

**CATALOG OF BARRIER PACKAGING MATERIALS.** Catalog provides samples and describes line of barrier packaging materials that includes laminated combinations of transparent films, metallic foils, and processed papers. All combinations are printable and heat sealable. Acme Backing Corporation. (B-673)

**PACKAGE MARKING AND CODING ATTACHMENT.** Illustrated folder describes the line of "Rolsocder" package marking and coding attachments that automatically print on containers during packaging or handling operations. Adolph Gottcho, Incorporated. (B-674)

**SHEETER AND REWIND.** Illustrated literature describes, gives floor plans of "Klingros" high-speed rotary sheeter and auxiliary rewind for web-fed, gravure, offset, letterpress and flexographic presses. American Type Founders. (B-675)

**CARTON PACKAGING MACHINERY.** Illustrated brochure gives specifications and floor plans for a line of automatic carton forming, lining, folding and closing machines, including models designed for speeds up to 120 cartons per minute or more. Peters Machinery Company. (B-676)

**STAPLING MACHINE.** Illustrated brochure gives description and schematic diagram of "Staple King" semi-automatic production

stapling machine for closing corrugated or fiber cartons 2½ to 40 inches high and 2 inches to 28 inches wide. International Staple & Machine Co. (B-677)

**RUST INHIBITING PAPER.** Technical bulletin gives detailed description of characteristics, performances, and uses of "Ferro-Pak" inhibitor paper for rust prevention, and describes method of testing the paper's rust prevention ability. The Cromwell Paper Company. (B-678)

**CAN MACHINERY.** 20-page illustrated catalog describes in detail an extensive line of machinery for forming and finishing metal cans and their closures. E. W. Bliss Company. (B-679)

**SARAN FILM.** 14-page bulletin gives detailed technical information on physical, chemical, and mechanical properties and performance of "Saran" films. Dow Chemical Company. (B-680)

**BOX FORMING MACHINE.** Illustrated folder describes the features of the "3JC Int-O-Matic" box-forming machine, designed to produce rigid setup nested-type boxes, trays, or boxes with covers. The International Paper Box Machine Company. (B-681)

**PRESSURE-SENSITIVE ADHESIVES.** Bulletin presents information on physical and adhesion properties of two formulations of "Cordo-Tack" pressure-sensitive adhesives, and suggests applications. Cordo Chemical Corporation. (B-682)

**CATALOG OF STEEL STRAPPING.** 43-page catalog gives detailed information on steel strapping methods, tools, and accessories, in terms of their uses in packing, shipping and handling of many products. Acme Steel Company. (B-683)

**METALLIC PAPERS.** Swatch book contains samples of gummed and ungummed gold and platinum papers, designed for use as cover or label stock. McLaurin-Jones Company. (B-684)

**MASTER SUMMARY OF BUYING HABITS.** 11-page report on a study of consumer buying habits in supermarkets includes master chart summarizing buying attitudes for 88 product classifications. E. I. duPont de Nemours & Co., (Inc.) (B-685)

**HEATERS FOR DRYING PAPER.** Illustrated brochure describes features of a line of electric thermal, gas, and infra-red parabolic heaters for conditioning and drying paper stock. Herbert Products Incorporated. (B-686)

**UNIT PACKAGING MACHINE.** Illustrated literature lists classifications and features of "Strip-O-Matic" machine that automatically forms, fills, and seals unit packets of any small product, using heat sealable material. Mercury Heat Sealing Equipment Company. (B-687)

**DEMONSTRATION KIT OF GREASE REPELLENT PAPERS.** Unusual demonstration kit contains all materials necessary to test the grease and oil repellency of "Repel" protective papers, which are treated with "Scotchgard" repellent size. Thimney Pulp & Paper Company. (B-688)

**MULTICOLOR FLEXOGRAPHIC PRESS.** Literature lists specifications for the "AP5" multicolor flexographic press, designed for printing, tinting and coating film, foil and paper stocks. Press provides work speeds up to 600 ft./minute. Manhasett Machine Company. (B-689)

**MEAT AND POULTRY PACKAGING MATERIALS.** Illustrated brochure gives details on many types of paper and plastic bags and wrappings for use in packaging meat and poultry products. Central States Paper & Bag Company. (B-690)

**PRESSURE PACKAGING SERVICE.** Illustrated brochure provides step-by-step description of the procedures followed by this company in performing their pressurized container custom packaging service. Continental Filling Corporation. (B-691)

**LABELER FOR GLASS CONTAINERS.** Illustrated literature presents the specifications and features of the "World Super C. M." high-speed, automatic labeler with a variable speed up to 300 bottles per minute. Economic Machinery Company. (B-692)

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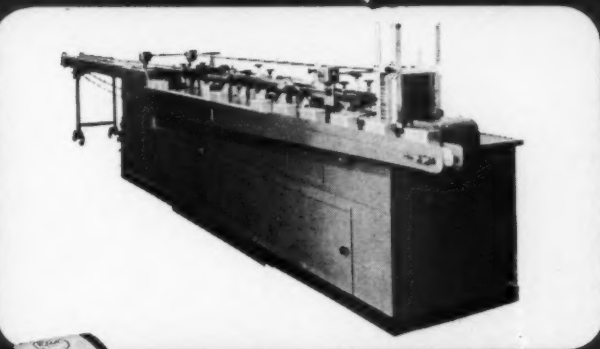
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FEBRUARY 1956



# U. S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps not accepted. Edited by H. A. Levey.

**Box-Making Machines**, G. S. Sillars (to Hoague-Sprague Corp., Lynn, Mass.). U.S. 2,723,601, Nov. 15. A box-making machine comprising a vertically movable support for supporting a box on end, an abutment movable horizontally into the box over the inner surface of the box end on the support, fluid-pressure-operated means and means connecting said fluid-pressure-operated means and abutment to move abutment into box.

**Automatic Partition Strip-Feeding Mechanism**, S. E. Schroeder (to Clinton Foods, Inc., New York, N. Y.). U.S. 2,723,602, Nov. 15. In a mechanism for automatically feeding pre-formed strips from stacks into an assembly zone in edgewise relation, in combination, a base, hopper means on base including simultaneously adjustable dividing walls, adjustable means for releasing partition strips from hopper and means for disposing released strips edgewise.

**Formless Paper-Box Machine**, A. S. Chandler (to International Paper Box Machine Co., Nashua, N. H.). U.S. 2,723,603, Nov. 15. In a machine for forming a set-up box from a unitary, flat, rectangular blank of bendable material, each blank having slits and fold lines which define a bottom panel, opposite end and side panels and notched tabs in extension of side panels, the combination of an upwardly extending forming channel of rectangular cross section including two pairs of longitudinally extending oppositely disposed forming plates adapted to act successively to upfold end panels and tabs.

**Window-Applying Machine**, P. E. Fischer (to E. G. Staude Mfg. Co., Inc., Concord, N. H.). U.S. 2,723,604, Nov. 15. In a window-applying machine wherein a thin transparent window strip is fed through feed rolls from a roll stand for a roll of strip material onto a rotating applicator drum driven at a greater peripheral speed than said feed rolls and is carried thereon by slip-drag before it is cut into window patches at point of engagement of applicator drum and knife roll.

**Apparatus for Making Laminated Tubes**, W. F. Stahl, Kenilworth, Ill. U.S. 2,723,605, Nov. 15. In apparatus for forming laminated tubing and having a polygonal mandrel adapted to have laminating strips wound thereon, a forming machine surrounding said mandrel and being adapted to be rotated, sets of shaft-equipped rollers carried by machine and being oppositely paired in substantially parallel alignment for engagement with opposite sides of mandrel.

**Bag-Counting Mechanism**, F. G. Brockhardt, Jr., J. H. Koch and A. C. Hansen (to Arkell & Smiths, a corporation

of New York). U.S. 2,723,606, Nov. 15. The combination of a pair of pinching conveyors to feed bags, a hopper to receive bags having gates mounted therein, each gate being adapted to oscillate about a fixed axis to form the hopper bottom and having a counter assembly.

**Labeling Machine Having Means for Orienting an Article Through a Predetermined Angle**, S. T. Carter (to Geo. J. Meyer Mfg. Co., Cudahy, Wis.). U.S. 2,723,743, Nov. 15. In a labeling machine of the kind wherein rigid articles, each generally rectangular in horizontal section and having alternating wide and narrow vertical faces, move in succession intermittently along a rectilinear path and wherein the articles are delivered to said path, means for holding each article in oriented position till engaged by clamping means.

**Bottle Closures**, E. Green (to Inter-Seal Corp., Spring Lake, N. J.). U.S. 2,723,773, Nov. 15. A closure for a bottle formed with an exterior finish including at least one circumferential bead lying downward from the end of the bottle.

**Tape Holder With Snubber and Cutter Tongue**, C. W. Vogt, Norwalk, Conn. U.S. 2,723,774, Nov. 15. Tape-dispensing mechanism comprising a holder to receive a roll of tape, a snubbing element on the holder having an inner surface over which the tape is withdrawn from roll and an applicator head having a cutter adjacent its outer end.

**Label-Applying Mechanism**, G. W. von Hofe and E. K. Wolff (to New Jersey Machine Corp., Hoboken, N. J.). U.S. 2,723,775, Nov. 15. In a machine for applying adhesive-coated sheet material to articles, a suction transfer device having a universal sheet-carrying surface capable of carrying sheets of different sizes and shapes and of areas substantially less than the area of such surface, means for providing on surface a variable suction area dependent on the size of the sheet carried thereby, including means for creating a suction condition in a portion of such surface smaller in area than the area of the smallest sheet.

**Cover Locking and Reinforcing Device for a Container**, P. Wasyluka (to Gaylord Container Corp., St. Louis, Mo.). U.S. 2,723,797, Nov. 15. In a rectangular container having a bottom and a pair of opposing end walls, each having an upper marginal reinforcing flap folded inwardly parallel to the inner face thereof, a pair of opposing side walls each having a hinged half cover adapted to fit snugly between the inner upper margins of opposing end walls when in closed position.

**Web-Splicing Mechanism for Wrapping Machines**, L. R. Bell and L.

Strauss (to American Machine & Foundry Co., a corporation of New Jersey). U.S. 2,724,426, Nov. 22. A web-splicing device for use in splicing the leading end of a reserve supply web to the trailing end of a supply of web being fed.

**Shipping Container for Fragile Articles**, P. Wasyluka (to Gaylord Container Corp., St. Louis, Mo.). U.S. 2,724,495, Nov. 22. A package for a relatively long, curved sheet of fragile material having a center portion and curved end portions terminating in substantially normal relation to the longitudinal dimension of the sheet, the package having an exterior container with opposed front and back sides, end walls, top and bottom panels, sheet engaging and interior packing comprising a pair of resilient, longitudinally unobstructed cradle members disposed closely adjacent the end walls of the container in bowed relation toward interior of container.

**Pallet Package With Strip-Mounted Legs**, J. A. Hollinshead (to Consolidated Paper Co., Monroe, Mich.). U.S. 2,724,496, Nov. 22. The combination of two spaced sheet strips in parallel, each strip having two end portions and an intermediate portion, three equal-length legs spaced along each strip intermediate portion, a first element comprising a stack of sheet material having a bottom thereof seating on the tops of the legs, the strip end portions extending upwardly past the legs and first element, and having overlapping portions on top of first element.

**Shipping Container**, W. G. S. Febr, Larchmont, N. Y. U.S. 2,724,537, Nov. 22. A rectangular shipping container comprising a sleeve having rigid side-wall elements hinged together so that the elements may be folded flat or unfolded to form an open-ended enclosure for articles to be packaged, an endless loop of continuously flexible film-like sheet material having a width substantially equal to one of the transverse dimensions of the container, said loop extending around the entire exterior of opposite side-wall elements transversely of the open ends of one dimension of the sleeve so that the sleeve is located within the loop.

**Packaging Tray and Blank**, J. J. O'Leary (to Bestpak, Inc., Natick, Mass.). U.S. 2,724,540, Nov. 22. A packaging tray constructed from a paperboard blank and comprising a bottom wall and two attached side walls, two end walls respectively integral with the two side walls at diagonally opposite corners of the tray, two vertically disposed end portions respectively integral with the two end walls and extending upwardly through slots in the bottom



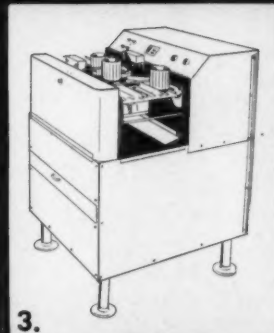
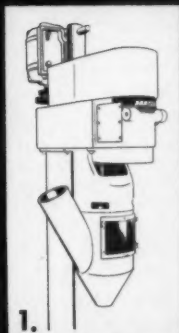
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## U.S. patents digest

wall, dividing the tray into three compartments.

Tray for Glassware and Other Fragile Articles, P. A. Nemoede (to Container Corp. of America, Chicago, Ill.). U.S. 2,724,542, Nov. 22. A tray composed from a blank of sheet material such as paperboard, for packaging glass and other fragile articles, the blank being cut, scored and folded to provide a bottom wall bounded by a plurality of edges and an upwardly extending side wall integral with each of the edges of the bottom wall, walls being joined in abutting relation at the corners.

Machine and Method for Applying Labels to Articles on a Conveyor, G. W. von Hofe (to New Jersey Machine Corp., Hoboken, N. J.). U.S. Re: 24,097, Nov. 29. A labeling mechanism comprising a roll, a companion hollow roll in spaced relation thereto and provided with perforations, a perforated belt traveling over and operated by rolls, an enclosure between the runs of belt in communication with the interior of perforated roll, a source of suction for developing a partial vacuum interiorly between the runs of belt, with perforated roll, and effective to hold adhesive-coated labels in place.

Method and Apparatus for Sealing Containers, J. C. O'Neill (to Weinon Corp., St. Paul, Minn.). U.S. 2,725,000, Nov. 29. An apparatus for sealing a container having in combination, a rotatable member adapted to carry said container, container having its upper edge portion reversely bent outwardly and downwardly along and substantially parallel to the outer side of container, a die above said member having an annular downwardly directed groove therein at its outer edge and having a flat bottom within and below groove, die having a vertical axis and being adapted to receive a cover having an outer channel portion formed to fit in groove.

Method and Apparatus for Producing Containers, J. C. O'Neill (to Weinon Corp., St. Paul, Minn.). U.S. 2,725,001, Nov. 29. An apparatus for making a container having in combination, a substantially horizontal table rotatable about a substantially vertical axis, a plurality of circumferentially and equally spaced mandrels secured to and upstanding from said table, means for intermittently rotating table the distance between centers of adjacent mandrels, a wrapping cage secured to and upstanding from table adjacent each of said mandrels.

Apparatus for Joining Thermoplastic Sheet Material, S. S. Miner and E. H. Clark (to United States Rubber Co., New York, N. Y.). U.S. 2,725,091, Nov. 29. Apparatus for joint lapped thermoplastic sheet material comprising a rigid heating platen, means for heating said platen to such an extent as to raise the sheet material at the joint to a temperature above its softening point, rigid cooling platens located on each side of heating platen for cooling the

areas of sheet material adjacent the joint to below its softening point.

**Feeding and Cutting Device for Printed Labels.** G. W. von Hofe (to New Jersey Machine Corp., Hoboken, N. J.). U.S. 2,725,101, Nov. 29. In a machine for manufacturing labels, means for feeding a web of flexible material bearing therein a series of label indicia and having a series of transverse, closed elongated slits longitudinally spaced at predetermined, substantially equally spaced intervals in transverse sections of such web.

**Apparatus for Severing Ends of String Tied About Packages.** W. R. Heffernan, J. L. Rigassio and L. Pronio (to Johnson & Johnson, a corporation of New Jersey). U.S. 2,725,102, Nov. 29. An apparatus for severing an excess string end from an object to which the string is fastened, the combination which includes means for seizing the string end at a point spaced from the point where the string is fastened to the object, a string cutter presenting a cutting edge, a pair of spaced shoulders presenting a slot located beneath and adjacent the string cutter and which extends inwardly toward and beyond said edge.

**Roll Tape With Cutter Blade.** C. W. Vogt, Norwalk, Conn. U.S. 2,725,105, Nov. 29. A cutting element adapted to cut adhesive tape material and comprising a body member having spaced ends, adjacent one of which a cutting edge is formed, means on the body forming a snubbing surface spaced from body lying in space between snubbing surface and body member and urged against snubbing surface and adapted to engage tape material inserted between the yielding means and the snubbing surface.

**Individual Packaging of Single Rolls of Pressure-Sensitive Adhesive Tape.** D. W. Davis (to Minnesota Mining & Mfg. Co., St. Paul, Minn.). U.S. 2,725,142, Nov. 29. A packaged roll of pressure-sensitive adhesive tape consisting of a container, a rigid pre-formed continuous ring nested within the container and a relatively soft roll of pressure-sensitive tape nested within the ring.

**Continuous-Motion Labeling Machine.** H. D. Manas (to M. R. M. Machinery Co., Inc., Brooklyn, N. Y.). U.S. 2,725,156, Nov. 29. In a continuous-motion labeling machine, means for moving containers in clamped condition along a linear path of travel, clamped condition of containers providing positive feed thereof in fixed spaced relationship during their movement along said path, a label magazine, means for transferring labels individually to individual clamped containers.

**Filling Machine.** J. T. Stigler (to The Pfandler Co., Rochester, N. Y.). U.S. 2,725,169, Nov. 29. A filling machine comprising in combination, a reservoir for the material to be filled into the containers and having a vertical axis, means for rotating the containers around vertical axis through a path of travel which at all points is equidistant from said vertical axis and means for filling containers as they rotate.

**Collapsible Cellular Carton.** W. H. Inman (to Bloomer Bros., Co., Newark, N. Y.). U.S. 2,725,174, 2,725,175, 2,725,176 and 2,725,177, Nov. 29. A cellular carton comprising a blank of sheet material cut, scored and folded to

(Continued on page 196)

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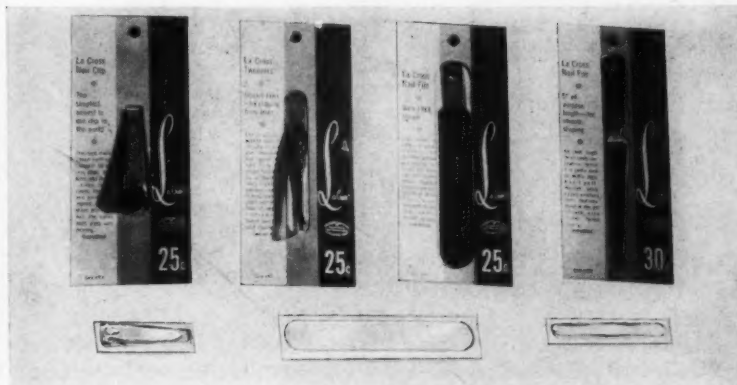
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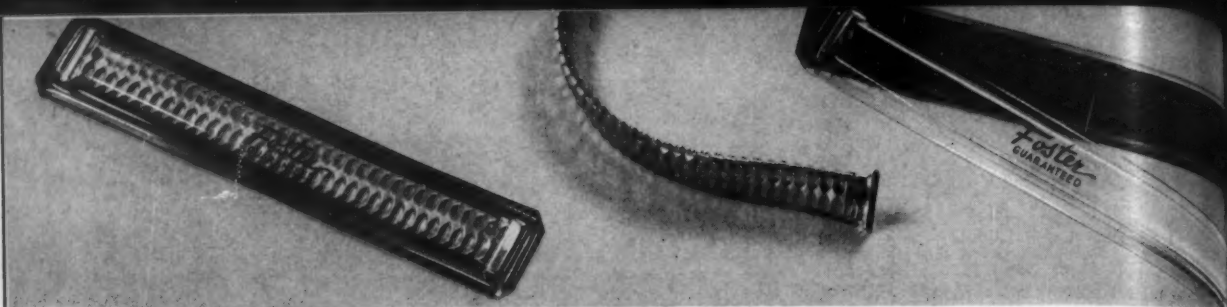
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PA-109





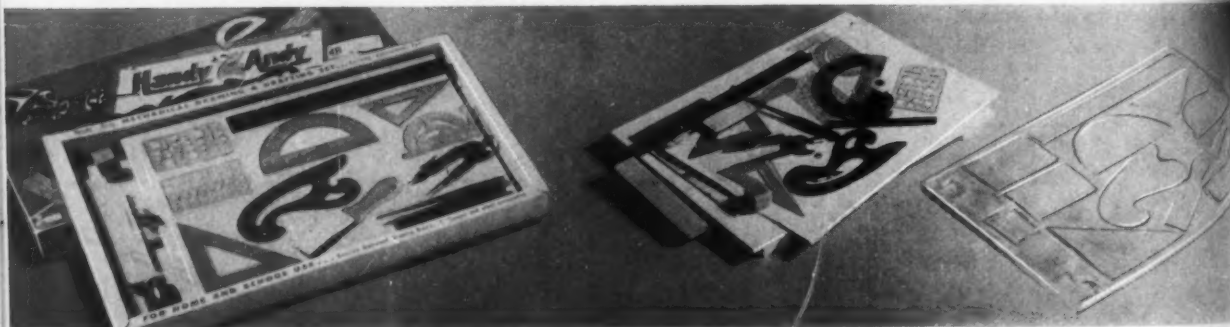
Foster watch-band package by William A. Crook Co., Watertown 72, Mass.



Anacin display-dispenser by Merit Displays Co., Paterson 4, N. J.



Premarin blister-package by Plastic Artisans, Inc., White Plains, N. Y.



Skil-Craft Handy Andy package by Arrem Plastics, Inc., Chicago 12, Ill.

Celanese Corporation of America, Plastics Division, Dept. 108-B,  
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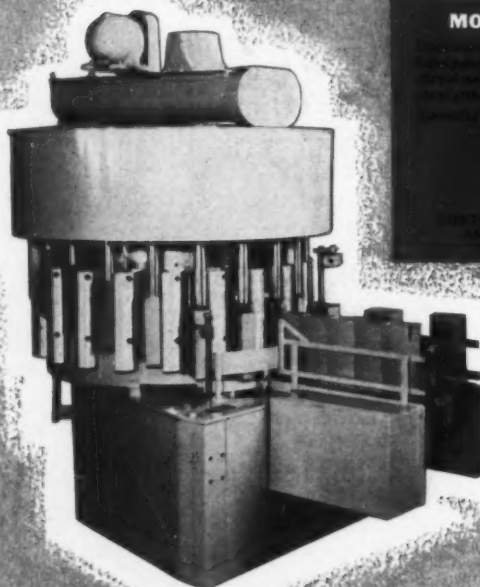
Celanese Corporation of America, Plastics Division, Newark 5, N. J., Canadian affiliate, Canadian Chemical Co., Limited, Montreal, Toronto and Vancouver.

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Capacity: 200 to 1000  
units per hour.  
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units per hour.  
Feeder: 10 to 100  
units per hour.

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## U.S. patents digest

[Continued from page 193]

form front and rear side walls, a pair of outer bottom sections having lower plies hingedly connected to said side walls along the lower edges thereof and extending inwardly into proximity with each other and connected together, having a double-thickness central longitudinal partition with upper and lower sections and inner cushioning bottom.

Apparatus for and Method of Assembling Enwrappings, C. W. Vogt, Norwalk, Conn. U.S. 2,725,798, Dec. 6. Apparatus for assembling a series of enwrappings which comprises a supporting surface, means to direct a series of spaced longitudinally disposed enwrappings over said surface and feed mechanism to advance elongated strip material into superposed position with respect to enwrappings on supporting surface.

Dispenser for Pressure-Sensitive Tape Having a Severing Blade Arranged to be Moved Away From its Operative Position, A. P. Krueger (to Derby Sealers, Inc., Derby, Conn.). U.S. 2,725,938, Dec. 6. In a mechanism for dispensing pressure-sensitive tape, a frame having a base and spaced side walls rising from base, a feed member rotatably supported by the frame between walls to deliver tape between front edges thereof.

System and Apparatus for Filling and Closing Cans Containing Pressure Propellant and Other Ingredients, H. D. North, Jr., and R. J. Stetz (to the Engine Parts Fg. Co., Cleveland, Ohio). U.S. 2,726,027, Dec. 6. A process of filling aerosol cans with an active ingredient and a liquefied gas for a propellant adapted to exert superatmospheric pressure at normal temperatures, comprising pouring an active ingredient into the open can and controlling the amount by shutting off flow consequent upon the weight reaching said amount, immersing the major portion of the can with ingredient therein in an open brine tank with brine liquid level below the open top, cooling the contents and can below freezing temperature of water, removing the can from brine, adding cold liquefied gas in amount controlled by its own weight, then capping and sealing the can with an aerosol valve therein while contents are still cold.

Cap Screwing and Tightening Machine, R. W. Saumsiegle, Lexington, Mass. U.S. 2,726,028, Dec. 6. In a machine for screwing and tightening caps on containers, the combination of a chuck for gripping the cap mounted to rotate about and move along an axis in alignment with the cap and container, and a clutch between chuck and rotating means for transmitting rotary motion.

Tape-Dispensing Mechanisms, W. S. Shee (to Derby Sealers, Inc., Derby, Conn.). U.S. 2,726,084, Dec. 6. A machine for dispensing pressure-sensitive tape comprising a frame, a feed roll rotatably supported thereon to draw tape from supply roll, stripper means to strip tape from feed roll and a pair of arms pivoted to frame in spaced relation, one at each side of frame.

# Great Things Happen

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## COSTS DOWN OUTPUT UP

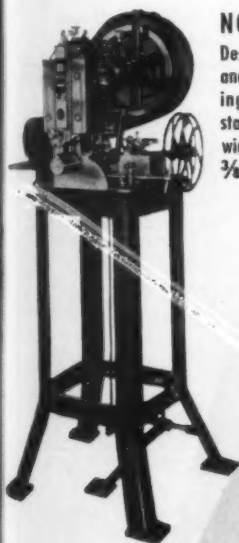
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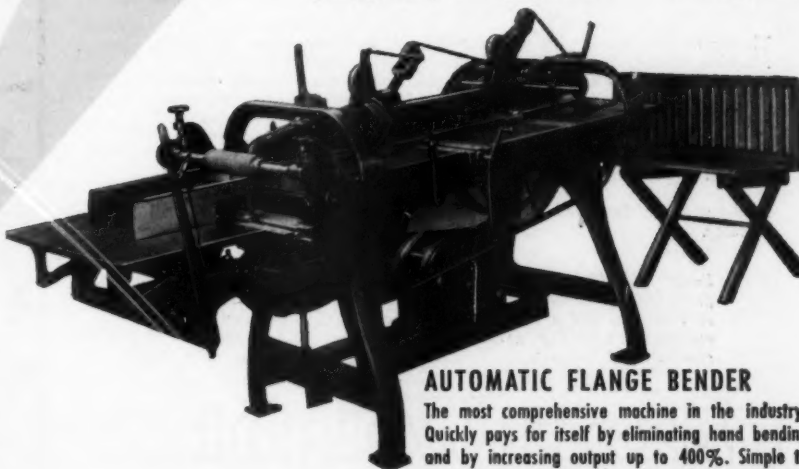
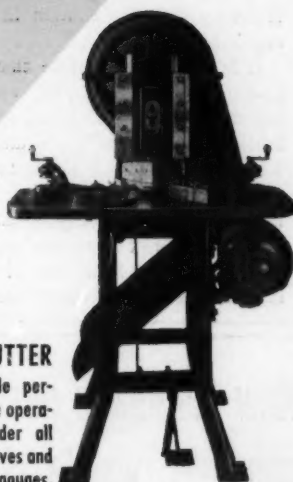
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886 Dupont Street

Pacific Coast Representatives: H. W. BRINTNALL CO., Los Angeles, San Francisco



## Harder, glossier waxed wraps use special polyethylene blend

[Continued from page 107]

because they mark the advent of a large and long-established restaurant operating organization—the John R. Thompson Co. of Chicago—into the rapidly expanding field of packaged ready-prepared, frozen food products. The Thompson firm dates back to 1886 and now operates more than 70 restaurants from coast to coast. This new program, representing the company's first activity in consumer packaged foods sold through regular retail outlets, was the outgrowth of a test marketing program under which several packaged frozen-food products were first sold through Thompson's popular Holloway House restaurant in Chicago's Loop.

It is interesting to note that the products were originally market tested in purely functional, simply labeled packages of the semi-rigid foil type, which made no attempt at appetite appeal. These packages did, however, give the company an opportunity to test consumer acceptance of different items, size of servings and such convenience features

as heating directly in the original package. Then, after decisions had been made on the products themselves, Holloway House went all out to give the finished packages strong sales impact and utility as well as maximum economy.

At the outset, items were sold from frozen-food storage cabinets installed in the company's Holloway House restaurant; later, distribution was extended to several other company outlets, as well as to various retail food stores.

It soon became apparent that some of the products had much greater sales appeal than others. Certain other items were eliminated because they were seasonal in nature and because it would have been necessary to reduce product quality in order to meet the price competition of similar foods already on the market. It was decided to limit the line, at least at the outset, to four products.

Located adjacent to a major cold-storage warehouse, the new Holloway House plant includes complete

kitchen facilities, along with the necessary and automatic overwrapping equipment.

After filling and overwrapping, products are packed in tear-strip-opening-style corrugated shipping containers holding a dozen packages. Loaded on pallets, the cases are immediately transferred by conveyor into an adjacent room where products are frozen by high-velocity air at a temperature of minus 45 deg. F. At present, distribution is confined to several major cities in the Midwest.

### Design

The design of the wrappers was developed by the company's advertising agency. With the exception of the Swiss steaks, which have a net weight of 12 oz., all the packages contain 14 oz. of product, comprising two servings. Printed in either four or five colors, the labels use product vignettes reproduced from carbro prints.

The red-roofed Holloway House drawing, as a brand symbol, appears

## New automatic net weighing machine offers constant, visible check on package weight

There's no guesswork with an Exact Weight Automatic New Weighing Machine. Over-and-under dial indicator is always visible to operator so weight adjustments and initial production set-up can be made quickly. You eliminate spot checking inaccuracies. Magnified indicator dial travel permits close tolerance to any predetermined weight. Newly designed Exact Weight scale is extremely sensitive and controls filling operation at two rates of feed. Weigh hopper is operated by air cylinder with time delay to assure complete discharge of product.

Model 620 NW has rated capacity of 10 lbs.—model 610 NW has 3 lb. capacity.

*Exact Weight manufactures more than 800 types of precision industrial scales in capacities from a few grams to 1000 lbs. and a complete line of automatic and semi-automatic weighing machines and baggers. Sales and service coast to coast.*

# Exact Weight

Better quality control

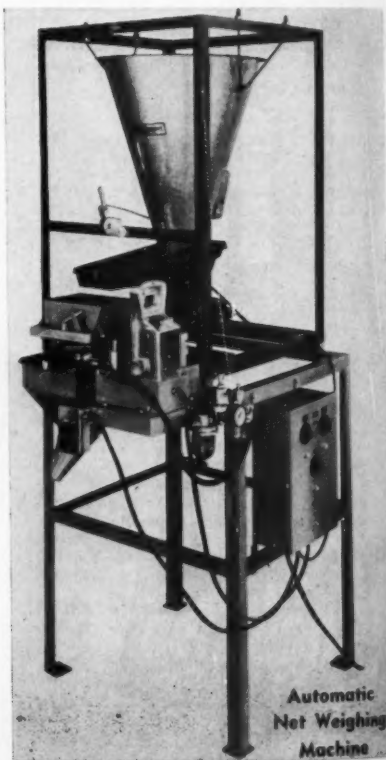
Better cost control

# Scales

THE EXACT WEIGHT SCALE COMPANY

914 West Fifth Avenue, Columbus 8, Ohio

In Canada: P. O. Box 179, Station 5, Toronto 18, Ont.



Automatic  
Net Weighing  
Machine



in the upper left corner of the main display panel and also on the vertical back panel of the package, where the three other items in the line are listed. Although the Holloway House illustration is subordinated to the product name on the display panel, on the assumption that the customer is primarily interested in the type of product rather than the trademark, it is felt that shoppers will eventually learn to look for "the package with the house on the wrapper."

Product name is repeated on the front panel and the two side panels of the package, facilitating quick selection regardless of the position in which the items are displayed. A circular price patch is provided on the right side panel and white space is also available on the left panel for pricing at that point if desired. White cobblestones in front of the house illustration afford another area on which prices may be marked.

### Standard 'bend' for folding boxes

Taking the lead in a standardization move that should be of interest to all users of automatic cartoning machinery, Lord Baltimore Press is urging all folding-box manufacturers to adopt a standard specification for making bends in tucks and flaps.

The new die standardization technique is aimed at effecting economies in high-speed packaging operations. More than four years of study and field applications have gone into perfecting the new method, according to Leonard Dalsemer, executive vice president of the company.

The technique involves the use of standard "bends" instead of free-hand methods in shaping contours of tucks and flaps in making dies for tuck-end folding boxes. Standardization, it is claimed, eliminates the infinite variation in shapes that causes trouble on high-speed cartoning equipment. Furthermore, it enables the user to obtain cartons from two or more sources of supply that will run interchangeably with much less possible need for machine adjustment.

Reportedly, standardization also simplifies the writing of specifications and purchasing of cartons. No mechanical drawings need be prepared. All the folding-box supplier

The entire lower side of the wrapper is devoted to illustrated instructions on preparing and serving the products. Line drawings on this panel show how the contents may be heated either by removing the wrapper and lid and placing the rest of the carton directly in the oven, or by removing the product and placing it in a double boiler.

Preliminary sales research on these products convinced Thompson officials that preparation instructions should be illustrated if possible—because many hurried consumers won't take time to read the printed directions carefully.

**Credits:** "Glamakote" hard-gloss roto-gravure printed overwraps and foil-laminated one-piece folding cartons by Marathon Corp., Menasha, Wis. Low-molecular-weight "A-C Polyethylene," used in coating, produced by Semet-Solvay Petrochemical Div., Allied Chemical & Dye Corp., 40 Rector St., New York 6.

needs to know is the style and exact inside dimensions of the carton wanted in order to prepare dies that will work efficiently on any carton-forming machine made in the United States.

In a number of instances, the Lord Baltimore Press prepared two sets of master dies on new orders; one set followed customer specifications exactly and one incorporated the newly developed standardized contours. After comparative machine tests were run with the two types of dies, the customer invariably chose the standardized style as the one that performed more efficiently, according to the company.

Mr. Dalsemer cited as an example a major producer of tooth paste who was able to maintain a substantially higher rate of speed on his packaging lines with negligible spoilage due to carton failure as a result of adopting standard tuck and flap contours.

Information on the new procedure will be distributed by mail to carton users in the form of a work kit. The kit includes a transparent plastic contour template, mechanical specification drawing, instruction booklet and actual "before-and-after" samples of the cartons.

### making a MARKED IMPROVEMENT in PAINT CAN MARKING



The problem of paper labels on cans becoming dirty and torn (and presenting a poor sales appearance on the retailer's shelf) plagued a typical paint manufacturer, until he began using the Markem Method. Now he's imprinting variable data (color, batch number, etc.) on 1500 lithographed cans per hour with a Markem 70AF machine. Changing imprint simply means sliding new type into the masterplate (instead of ordering 2000 new labels). Whether it's a container, product, part or tag you're marking—for decoration, designation or identification—ask Markem. Thousands have, for the past 40 years. Write Markem Machine Co., Keene 1, New Hampshire.





## MORE THINGS "STAY PUT" IN NEW SQUEEZE BOTTLES BY PLAX

New linings developed by Plax stop seepage of oils and aromas from polyethylene bottles — assure practical shelf-life for host of new uses. Among products that can now be packaged in handy, colorful Plax squeeze bottles are: sun-tan oils, baby oils, hair tonics, mineral oils, complexion lotions, lubricants, eucalyptol-base pharmaceuticals.

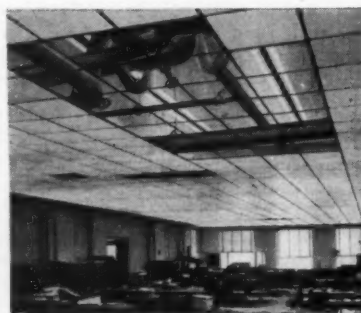


**Tough, non-toxic Polyflex®** transparent lids protect contents and tempt appetites.



### SEE ALL YOU BUY

Tough, semi-rigid, low cost trays of transparent Polyflex mean no more "blind spots" for tomatoes, meats, fruits, and other products.



**U. L. accepted** Plax lighting panels hide piping, electrical wiring, sprinklers, ducts.

These are just a few of the new things in plastics being created by Plax research. More are in the works. Maybe we have the sales-building, profit-making idea you're seeking for your business. Why not contact us and see.

Leaders in Making Plastics More Useful

# PLAX

**PLAX CORPORATION**  
P. O. BOX 1019 • HARTFORD, CONNECTICUT  
In Canada: Plax Canada, Ltd., Montreal & Toronto

## Kaiser food containers

Kaiser Aluminum & Chemical Corp. has announced its entry into the aluminum food container field with two plants, one on the West Coast and the other in the Midwest.

The West Coast plant is being acquired through the purchase of Foil Kraft, Inc., Los Angeles. Kaiser Aluminum assumes active management of Foil Kraft immediately. Foil Kraft now makes a broad range of aluminum containers distributed nationally to major food processors. A. J. Johnson, president of Foil Kraft, will continue with the organization.

The Midwest plant will be a new facility, costing more than \$1 million, located on a 50-acre site at Waukegan, Ind. The site is a relatively short rail and highway distance from the company's new sheet and foil rolling mill at Ravenswood, W. Va., which is scheduled to be in operation by the time the container plant is completed this summer.

In announcing its new venture, the Kaiser company predicted that the 40 million pounds of aluminum sheet and foil now going into a billion aluminum food containers annually will be more than doubled by 1960.

## Packaged feeding

[Continued from page 133]

ainers with heat-sealing-type covers replaced formerly used paper food containers. Typical of the products distributed via 18 trucks to approximately 200 plants in the Milwaukee area are chili con carne, egg-drop soup, boiled New England dinner, beef noodle soup, potatoes, gravy and Swedish meat loaf, vegetable beef soup, and braised beef with noodles. Menus are varied from day to day to maintain appetite appeal of the products offered.

According to Calvin Gilbert, head of the company, the new semi-rigid foil containers, in addition to their merchandising advantages, also offer important savings of processing labor in his kitchen and in the reduction of waste through accurate portion control.

**Credits:** No. 111 deep 8-oz. semi-rigid aluminum foil cups, sealing rings and covers, and sealing equipment supplied by Phoenix Industries, Inc., Div. of Mullen Container Corp., 1020 Rush St., Chicago 11.

PAPER • FOIL

CELLOPHANE

**CELERO**

Gravure  
INKS

PAPER BOARD  
FILMS • VINYL  
PUBLICATION

In meeting the demands of the rapidly growing package printing industry, S&V has developed a complete line of rotogravure inks that are the most successful on the market.

Conceived and produced by the CELERO Division of S&V, these outstanding gravure inks offer package printers the answer to the special requirements of cellophane, foil, paper, board, polyethylene, vinyl and other films. They are brilliant, outstanding for smooth printing, and highly resistant to scuffing. Their uniform high quality guarantees consistently better results every time. Package printers who have already tried S&V Gravure Inks have discovered there are no other rotogravure inks that can compare for clarity, performance and economy. Try them yourself, and see!

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**Sinclair and Valentine Co.**

Main Office and Factory: 611 West 129th Street, N. Y. 27, N. Y.

OVER 35 BRANCHES PROVIDE SERVICE FROM COAST TO COAST



**Give Your Product  
a Sales "Assist"  
with Distinctive—**

# MACK CLOSURES

## Mack Standard Molded Closures...

Molded plastic closures in all stock sizes are available for fast delivery from regular stocks in reasonable quantities. A wide selection of decorative designs assure a "custom look" at the cost of an economical standard seal.

## Custom Packaging of Distinction...

Call on Mack packaging technicians for new ideas in special packaging. Custom packaging by Mack has given a "sales assist" to countless successful promotions. Consult Mack on your custom packaging and closures requirements, now! Call or write for samples and prices, today!

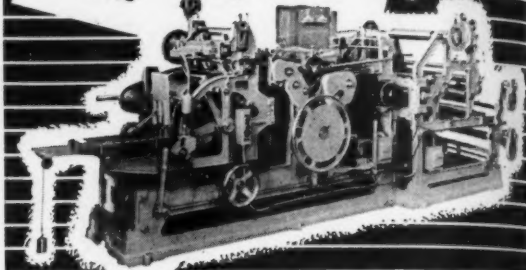
**MACK**  
Distinctive Packaging  Since 1920  
**MOLDED  
EXCELLENCE**



**MACK MOLDING  
COMPANY • INC**  
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WAYNE, NEW JERSEY

Other Plants at:  
ARLINGTON, VERMONT  
and WATERLOO, QUEBEC,  
CANADA

**JET-SPEED  
PRODUCTION**  
with minimum  
waste



## POTDEVIN Flat and Square CELLOPHANE Specialty Bag Machine

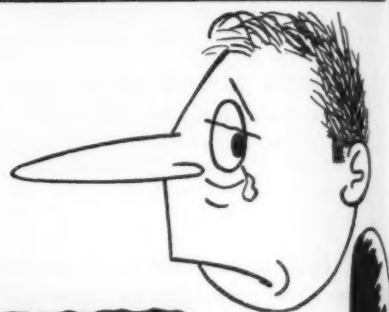
Up to 300 well-formed, high quality bags a minute. Lip-type construction permits high speed conversion of PT or MST film without fusing, assuring easy opening by hand or on automatic filling machines. Wide range of sizes — from 2" x 6½" up to 10½" x 16½".

Write for detailed information.



**POTDEVIN MACHINE CO.**  
244 North Street  
Teterboro, N. J.

Designers and manufacturers of equipment for Bag Making, Printing, Coating, Laminating, Gluing and Labeling



# STATIC got you down?

Static costs much more than its elimination. The SIMCO "Midget" Static Eliminator actually guarantees to be the most effective—yet least expensive—means of removing static from all packaging and converting machinery... including cutting, slitting, bagmaking, wrapping, and filling machines. It is adaptable to all types of materials—including paper and synthetic films. Equip your machinery now.

**the SIMCO company**  
920 Walnut Street, Lansdale, Pa.



## Cracking a new market outlet

[Continued from page 113]

and returns. Cans were unacceptable by consumers and too expensive. Paper cartons presented the risk of leakage and the use of plastic coating on paper bottles made them too expensive.

These findings showed Arrowhead & Puritas' novel half-gallon bottle, which was then on the drawing boards, to be just the right sort of container. But making it pay off would take a lot of work.

Market study indicated that Arrowhead would have to capture a substantial share of the super-market water business just to break even, let alone make a profit. But the company decided that, even without an actual dollars-and-cents profit, the institutional advertising value of having its name on display on grocery-store shelves would be worth the effort involved.

By the fall of 1954 Arrowhead was ready to go ahead with its super-market invasion. There was plenty to do on the operating side: getting the new bottle into production, converting trucks to carry the new size, setting discounts and advertising budgets, choosing and training new salesmen-drivers.

Getting the bottles into the stores was no easy job. Even with a bottle of outstanding design and a new display rack that held three dozen bottles, the stores weren't exactly jumping at the chance of stocking another brand of water.

The only way to put the new Arrowhead & Puritas bottles across appeared to be by means of an intensive local advertising and promotional drive. This was kicked off by a direct-mail "teaser" campaign that was backed up by strong trade advertising. Sales representatives, meanwhile, called on stores system-

atically, in the order in which they hoped to develop the most economical truck routes. Careful planning paid off immediately: in three months, the company's bottles were on sale in 2,000 stores, representing 85% of the major food chains in Los Angeles.

Once the bottles were in the stores, the campaign was intensified. Television advertising (plus considerable free publicity) over a local station was used. Thousands of folders were placed on tables in hotels, restaurants and bars, saying that Arrowhead spring water was being served there. A mailing of 170,000 coupons offering 7 cents off the list price was distributed to every family in San Diego and a two-for-one sale was held in the rest of Southern California. This sale is said to have increased volume fourfold temporarily.

The results of the first year of promotion for the new bottle are now in and Arrowhead & Puritas' venture with a new package into a new field of distribution can be considered a success. Sales estimates by the consultants proved conservative: instead of the predicted 10% of the market by the end of the first year, Arrowhead & Puritas had more than 25% of it. And, once development and introductory costs are written off, the project will actually be returning a profit.

A major share of the credit can go to the company's radically different container. Says R. S. Suttle, Arrowhead & Puritas vice president, "We are getting a bigger share of the market because we received greater acceptance of package design by buyers and public." But equally important was the company's carefully planned program to put the new package across to both stores and consumers.

## All-plastic vacuum-formed contoured pack

[Continued from page 123]

package to normal use requirements; for example, the customer can purchase either two or four corner irons with the necessary screws for fastening them.

The sealed plastic packages, placed in chipboard patent containers holding 12 or 24 of the unit

packs, are delivered to Sears in corrugated shipping cases. In Sears retail outlets, the vacuum-formed packs are sold directly from glass-partitioned self-service display racks. No special display units are required, since the packages afford a

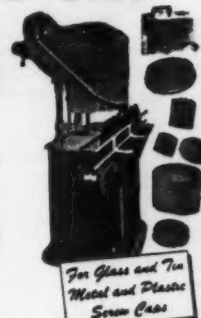
[Continued on page 206]

## MODERNIZE SCREW CAPPING OPERATIONS

with the  
FULLY AUTOMATIC

### "TITE-CAP"

#### SCREW CAPPER



Submit Sample  
Containers  
and Caps  
for Prompt  
Introduction to  
A Gilt-Edged  
Investment!

For Glass and Tin  
Metal and Plastic  
Screw Caps

- Quick Change-Overs; Easy Adjustments.
- Trouble-Free; Any Handy-Man Services It.
- Performs the Work of 2 or 3 Men.
- Increased Output, Automatic Operation. Pay for the "TITE-CAP" in about 6 months.
- New Hopper Handles Large Variety of Caps.
- Models for all Types of Capping Operations including Special Closures, Inner Seals, Lids, Plugs, Etc.

**TITE-CAP MACHINE CO. INC.**  
56 Rose St., New York 38, N. Y.

## "SCIENTIFIC" portable SEMI-AUTOMATIC STRAIGHT LINE VACUUM FILLER



- Fills Directly from Drum; No Overhead Tanks Required.
- Vials to Quarts, Glass or Tin.
- Up to 10 Spouts for Small Containers.
- Quick Change-Overs. Cleans Itself. 5 Minutes.
- ONLY ONE OPERATOR for Loading and Filling.
- LOW PRICED BENCH and STAND MODELS.

Actually Pays For Itself in A Few Weeks  
Write for FREE TRIAL OFFER

## Whirlwind SCREW CAPPER

- Replaces Uncertain Hand Capping; Eliminates Fatigue and Worn-Out Fingers. ANY CAP—ANY CONTAINER—PERFECT SEALING!
- Adjustable Tension Device Controls Cap Tightness.
- Portable, Flexible, Fast; Easy to Operate.



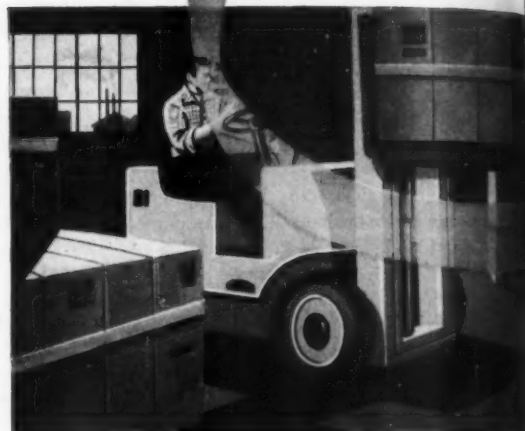
CAN YOU AFFORD TO BE WITHOUT IT?  
ACT NOW! Send Sample Caps for 100% TRIAL

**SCIENTIFIC FILTER CO.**  
56 Rose St., New York 38, N. Y.



U. S. Holdtite are the amazing wonder-working pressure-sensitive tapes for packaging! Applied with just finger pressure, they bind, hold, mask, reinforce, protect and serve as an indispensable tool for hundreds of uses. They are so much a part of the packaging field that the wonder is how packaging ever got along without this wonder-worker line. Well-named, too, because once applied, a U. S. Holdtite tape will never come loose by itself; it must be removed. *It's a tape line that's respected by all packagers everywhere and is the only tape line that will do so much, so well.* Order U. S. Holdtite tapes from your distributor, from any of our 27 District Sales Offices, or write us at Rockefeller Center, New York 20, N. Y.

# WONDER W



U. S. Holdtite pressure-sensitive tape holding packages on pallet.



U. S. Holdtite Tape is ideal for special promotions, such as banding two items together. Once applied, they are joined securely.



Mechanical Goods Division

# United States Rubber

# ER WORKER! U.S. HOLDTITE®

## line of pressure-sensitive tapes!



U. S. Holdtite sealing the lids of chemical fiber drums.



U. S. Holdtite is used by food packers as an airtight seal on bumpy, uneven packages.



U. S. Holdtite holds so strongly it can easily support a full-grown man in a sealed container.



U. S. Holdtite is used by appliance makers to hold products in place and protect costly surfaces during shipment.

**Style #501**—Crepe paper back. Strongest crepe backing on the market. So flexible it is the one right tape for all curve work. No "feather edge" when used for painting. Strips clean—won't flake or break. Takes up to 200 degrees temperature.

**Style #511**—Flat paper back. Has TWICE the strength of conventional masking tape. Ideal for straight line masking, also for binding, bundling, and sealing.

**Style #503**—Crepe paper back. For high temperature baking operations. Takes up to 300 degrees temperature for 1½ hours. A favorite tape on original equipment items.

**Style #508**—Paper-backed glass filament reinforced tape

with 240-pound tensile strength. The one right tape for strapping and sealing cardboard cartons. Will not work loose. An extremely powerful adhesive that makes tampering and pilfering impossible to conceal. A single strand will hold boxes piled up on a skid.

**Style #601**—Waterproof cloth tape with plastic coated back. Perfect for waterproof sealing, masking, protecting anything that will be exposed to the weather.

**Style #604**—An ideal low-cost cloth "expendable" tape for one-time use... protecting tool edges and fittings, bundling parts, keeping wrappings on toys, guarding fragile wood from splitting while being sawed.



# RESiNA

## CAPPERS

*a model for every purpose . . . a speed for every need!*

### NEW! INNERSEALER

*Jobs  
them all*



**RESiNA**

Automatic innerseal machine for selecting and applying standard innerseals to various types and sizes of tin cans as commonly used in the oil industry.

Capacity: 60-120 per minute.  
Seals from 7/8" to 1 1/2".

#### AND SPECIAL MACHINERY

Agents in principal cities throughout the United States and Canada.

Write for descriptive literature

**RESiNA**

**AUTOMATIC MACHINERY CO., INC.**

Brooklyn 31, New York

[Continued from page 203]

clear view of the merchandise and also carry all information required by the customer.

At the plant of the vendor where the Elgin line of hardware items is manufactured, the products are packaged by depositing them, together with the required number of screws, in the form-fitting cavity of the red opaque bases and heat sealing the transparent cover into its proper position.

On some items, this operation is carried out at individual tables equipped with a heating unit which is lowered momentarily against the top of the closed package, fusing the two sheets of plastic material together by means of several small "dimples" located around the margin of the package.

On certain higher-volume items, packaging is handled as a semi-automatic operation by placing the bottom sections on fixtures mounted on a revolving circular table. As the table stops at each required station, packers insert the hardware items themselves and the accompanying screws.

In the very last stage of this operation, the transparent matching cover is placed in position on the base and the completed package moves beneath the heating unit where the final seal is made.

With this rotary set-up, packaging of the Elgin hardware items may be handled on a high-speed, continuous basis.

**Credits:** Sheet plastic components extruded from Celanese S704 acetate resin, vacuum formed and silk screened by Trend Plastics Co., 40 Belden Ave., Norwalk, Conn., using Auto-Vac machine by Auto-Vac Co., 1984 State St. Ext., Bridgeport, Conn.

#### Mylar price reduced

A reduction of 25 cents per pound in the price of Mylar polyester film has been announced by E. I. du Pont de Nemours & Co. Effective immediately, the reduction applies to all types and gauges except 25 and 35 gauges, the thinnest film.

This is the third price drop since the start of commercial production of the film in the fall of 1954. With this new reduction, the price of Mylar now ranges from \$2.25 a pound for most heavy gauges to \$4 a pound for the very thin 25 gauge.



*Made with the skill  
that assures protection*



*This 17th Century Gauntlet typifies the skillful craftsmanship of medieval armormakers. The expert positioning and attachment of adjacent parts permit all the necessary flexibility. The intricate carving and embossment give it a distinct, attractive appearance. And the careful design and workmanship assure the maximum protection. In battle and in jousts, combatants had to depend on the armorer's skill . . . often for their lives.*

Jones & Laughlin Steel Containers provide dependable protection for your products. They are built of sturdy, high-quality J&L Steel Sheet. Careful manufacture assures accuracy

in all fittings and closures. J&L containers have a trim appearance which can be decorated attractively with colorful designs and illustrations by means of J&L's lithographic process.

Coatings and lacquers are evenly applied—both inside and outside. J&L pails and drums are chemically treated to keep all surfaces clean and dry.

Depend on J&L Steel Containers for the protection your products require.

Order them through plants in leading industrial centers. You will find J&L service prompt and efficient.



**CONTAINER DIVISION**

**Jones & Laughlin**  
STEEL CORPORATION

405 LEXINGTON AVE.  
NEW YORK 17, N.Y.



**SALES OF AEROSOL PRODUCTS RISE 4000%!**

**JUST SEE ANY**

## Contract Fillers

The Contract Fillers listed are equipped to fill aerosols with Genetron Propellants and are believed thoroughly qualified. Care has been taken to make the list complete, but there may be others in your area who can serve you equally well.

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Toronto, Ontario

Aero-Fil, Inc.  
P.O. Box 274  
Franklin Park, Ill.

Aeropak, Inc.  
3001 West 37th St.  
Chicago 32, Ill.

Aerosol Co., Inc.  
525 North 11th St.  
Neodesha, Kansas

Aerosol Corporation of the South  
203 Scott St.  
Memphis, Tenn.

Aerosol Industries Division  
of Zenith Drug, Inc.  
1 Vesey Street  
Newark, N. J.

Aerosol Methods  
Johnson Road  
Norristown, Pa.

Aerosol Techniques, Inc.  
111 Silliman Ave.  
Bridgeport, Conn.

A-M-R Chemical Co., Inc.  
985 East 35th St.  
Brooklyn, N. Y.

Armstrong Laboratories  
421 La Grange St.  
Boston 32, Mass.

Associated Brands Inc.  
35 Claver Place  
Brooklyn 16, N. Y.

George Barr & Co.  
3601 South Racine Ave.  
Chicago, Ill.

850 East 62nd Street  
Los Angeles, Calif.  
4747 Bronx Blvd.  
Bronx, New York

Bridgeport Brass Co.  
30 Grand Street  
Bridgeport, Conn.

Bromm Chemical Co.  
319 Goodsell St.  
Evansville, Indiana

Capitol Packaging Co.  
1441 S. Circle Ave.  
Forest Park, Ill.

Chase Products Co.  
20th & Gardner Road  
Broadview, Ill.

Claire Manufacturing Co.  
7640 S. Vincennes Ave.  
Chicago, Ill.

Cleveland Aerosol Packaging Corp.  
(Division of Plasti-Kote, Inc.)  
425 Lakeside Ave., N.W.  
Cleveland 13, Ohio

Connecticut Chemical Research Corp.  
706 Bostwick Ave.  
Bridgeport, Conn.

Connecticut Chemicals (Canada) Ltd.  
Curity Ave. and Hollinger Road  
Toronto, Ontario

Continental Filling Corp.  
123 North Hazel St.  
Danville, Ill.

Edgerton & Riley, Inc.  
Muirkirk, Md.

Eveready Pressurized Products, Inc.  
1022 Belt Line St.  
Cleveland, Ohio

Fluid Chemicals Co., Inc.  
878 Mt. Prospect Ave.  
Newark, N. J.

Gard Industries, Inc.  
733 Green Bay Rd.  
Wilmette, Ill.

Inland Paint & Chemical Co.  
2144 W. 49th St.  
Chicago, Ill.

Kan-Jax Chemical Company  
P.O. Box 1011, 2500 Summit  
Kansas City 41, Missouri

Robert J. Kerr Chemicals, Inc.  
9 South Fairview Ave.  
Park Ridge, Ill.

LaMaur Products, Inc.  
520 Plymouth Bldg.  
Minneapolis, Minn.

Lawson Chemical Products Co.  
5634 Selmaraine Drive  
Culver City, Calif.

Lenk Manufacturing Co.  
30 Cummington St.  
Boston, Mass.

McGuire & Co.  
833 47th Ave.  
Oakland, Calif.

National Spray Can Filling Corp.  
1238 East 14th St.  
Brooklyn, N. Y.

New Jersey Aerosol Packaging Co.  
108 Ashland Ave.  
West Orange, N. J.

Pactra Chemical Co., Inc.  
1213 North Highland  
Los Angeles 38, Calif.

Par Industries, Inc.  
2193 East 14th St.  
Los Angeles, Calif.

Peterson Filling & Packaging Co.  
Hegeler Lane  
Danville, Ill.

Plaze, Inc.  
9401 Watson Industrial Park  
St. Louis, Mo.

Power-Matic, Inc.  
Stroudsburg, Pa.

Powr-Pak, Inc.  
643 North Ave.  
Bridgeport, Conn.

Products Manufacturing Corp.  
135 Stevens Ave.  
Little Falls, N. J.

Puritan Distributing Co.  
160 Washington St., No.  
Boston 14, Mass.

Regal Chemical Corp.  
115 Dobbin St.  
Brooklyn 22, N. Y.

Gene Rose Co., Inc.  
1637 South Kilbourne Ave.  
Chicago, Ill.

Schaefer Paint Company  
334 West Marion St.  
Lancaster, Penn.

Sprayon Products Co.  
2075 East 65th St.  
Cleveland, Ohio

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*It's easy to cash in on the Booming Aerosol Market! . . .*

**CONTRACT FILLER LISTED HERE!**

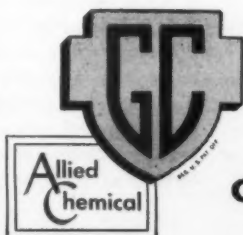
Static markets come alive with the use of aerosol push-button packaging! This has resulted time and again with the new best sellers taking a featured place on counters and shelves of stores all over America. Annual production of aerosol products is approaching 200,000,000 units, an increase of nearly 4000% in 10 years.

**Profit from Aerosols Without a Penny's Investment in Plant or Equipment!**

The potential profit in aerosols has been proved . . . there's no reason now for delay! If you have a product that can be sprayed, brushed on, dusted or daubed, see any Contract Filler listed about producing it as an aerosol. You will find them skilled in this revolutionary packaging technique, and equipped for economical production of almost any quantity from small test runs to sustained volume. You don't have to invest a cent in special equipment or personnel!

Don't wait while others win the market for aerosols. Start realizing the big profits aerosols offer by consulting your nearest Contract Filler now.

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For American  
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**Assure Customer Satisfaction with**

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**Aerosol Propellants**

*A Propellant for Every Aerosol Need!*

You can help give your aerosol products outstanding competitive advantages by the use of General Chemical's expanded line of Genetron Propellants. Used singly or in combination, they are making possible a continuous increase in the variety of aerosol products, and are permitting the use of new and more attractive types of containers. A Genetron Propellant formulated for your product is assurance of lasting consumer satisfaction. The principal Genetrons are:

GENETRON 12—Dichlorodifluoromethane  
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GENETRON 320/12 MIXES  
GENETRON 101—Monochlorodifluoroethane  
GENETRON 320/101 MIXES  
GENETRON 226—Trichlorotrifluoroethane  
GENETRON 141—Monochlorodifluoroethane  
GENETRON 100—Difluoroethane (1-1)  
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*For further information, send for our illustrated technical manual and market data book . . . "ALL ABOUT AEROSOLS"*

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**GENERAL CHEMICAL DIVISION**

ALLIED CHEMICAL & DYE CORPORATION

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don't let your  
sales  
manager  
be a



## "PACKAGING ORPHAN"

In your company he may be called the Sales Manager . . . or the Merchandise Manager . . . or the Distribution Manager; the title isn't important. The chap we're talking about is the one whose interest in the packaging function sometimes may be considered secondary, while the successful completion of his duties depends in a significant measure on the appearance of your company's packages and the protection they give to your products.

If this man, whatever his title may be, doesn't get his own personal copy of *Modern Packaging* every month to keep him up-to-date, you've a "packaging orphan" on your hands. While he should be, he probably isn't up on all the latest techniques of package merchandising, on how to package to obtain sales in multiple units, on what's "hot" in protective and decorative packaging. . . .

Modern Packaging isn't a cure-all for this man, but it will keep him posted on the important packaging developments he ought to know about. A twelve month subscription for him costs only \$6.00 in the United States and Canada, \$10.00 in Pan America, \$15.00 elsewhere. Write today; we'll enter his subscription immediately and bill your company later.

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## MODERN PACKAGING

575 Madison Avenue  
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## Plans for the 25th Packaging Show

With only two months to go, final details now are being arranged for the American Management Assn.'s Silver Anniversary Packaging Exposition. Scene of this year's 25th annual show will be Convention Hall in Atlantic City, on April 9-12, and some 30,000 executives from more than 9,000 companies are expected to be present. The concurrent AMA Packaging Conference will also take place in Convention Hall and an attendance of more than 1,000 packaging specialists is anticipated.

The three-acre exposition will provide a panorama of progress in packaging, reflecting both the field's growth over the past quarter century to a better than \$10-billion-a-year industry and the corresponding growth of the exposition.

Speakers at the conference, reporting on the newest developments in packaging machinery, materials and methods, will not only stress the technical progress already made, but will look ahead to the advances that should be forthcoming over the next few years. In addition, representatives of close to a dozen packagers will describe how they package today and how they would like to package tomorrow.

Close to 400 exhibitors will take up some 130,000 sq. ft. of the Convention Hall, the AMA predicts, to display the latest in equipment, materials and services for packaging and shipping. With the exposition still two months away, more than 350 exhibiting firms have reserved approximately 85% of the available space in the hall.

Indications are that the 1956 show will be larger than the last Atlantic City one, in 1954, when 361 exhibitors occupied nearly 130,000 sq. ft. of space. The anticipated attendance of 30,000 would be substantially ahead of that of 1954, when more than 24,000 visitors registered, and about equal to that of 1955. Last year's Packaging Exposition, in Chicago's International Amphitheatre, was a record one, with more than 380 exhibitors and approximately 133,000 sq. ft. of floor space.

The development of packaging in the 25 years since the first AMA packaging show—held in the Garden Roof of the Hotel Pennsylvania in New York in 1931, with 34 exhibi-

tors, 2,000 visitors and a total area of 2,700 sq. ft.—will be commemorated in a souvenir book for distribution to companies participating in the show.

In addition to reviewing the growth of the show and of packaging over the past 25 years, the booklet will list each booth of the 1956 show and will interpret the exposition in terms of the machines, equipment, supplies, materials and services applicable to each major industry that uses packaging.

### Conference

The AMA conference program will explore the packaging field on a broad front, emphasizing throughout the growing importance and complexity of packaging and the resulting need for trained and highly qualified management personnel. Specific topics to be discussed include organization structure for packaging, coordination with other functions in the company, characteristics and applications of packaging materials, trends in packaging machinery, as well as such specialized areas as control of color and printing quality, adhesives and plastic containers.

► The opening morning will be devoted to presentation of a case study in coordinating the packaging function with marketing, production and purchasing. Speakers from a consumer-goods company with international distribution will discuss the packaging function in its numerous divisions and its automatic packaging operation.

► Another morning session will take up the administrative and managerial structure of the packaging organization in both consumer-goods and industrial-products companies. These companies will demonstrate the savings which result from efficient management of the packaging function and describe techniques that can be applied in companies of all sizes.

► An entire session will be given over to industrial-goods packaging. Speakers from a company that produces both industrial and consumer hard goods will review its industrial packaging.

► Representatives of a volume manufacturer of automotive parts will re-



port on their long-range planning and their needs for semi-automatic and automatic packaging machinery development. Two large consumer-goods companies will describe their projected requirements for packaging machinery to meet the coming era of automation.

► How to evaluate quality of printing on incoming packaging materials also will be discussed. A technique for determining whether printing quality is satisfactory and for insuring uniformity among vendors will be described.

► One session will deal with adhesion methods used by both packaging consumers and converters.

► Another will be devoted to a study of plastic packages as they bear on increasing sales and profits, with stress on their role in impulse buying. Emphasis will be placed on the importance of preparing specifications for these containers on a factual basis.

#### Hours

To enable packaging executives to attend both the exposition and the conference, the exposition will be open only in the afternoons and the conference sessions will be held in the mornings. The conference will open at 9:30 a.m. on April 9, 10 and 11 and close about noon. Meetings will be in the Grand Ballroom of the Convention Hall, with concurrent sessions in other rooms.

Hours of the show will be as follows:

Monday, April 9—Noon to 6 p.m.

Tuesday, April 10—Noon to 9 p.m.

Wednesday, April 11—Noon to 6 p.m.

Thursday, April 12—10 a.m. to 3 p.m.

#### Registration

Information about conference registration may be obtained by writing the Packaging Division, American Management Assn., 1515 Broadway, New York 36. Tickets to the exposition, for which there is no charge, may be obtained in advance from any exhibitor, from the AMA, or from the exposition management, Clapp & Poliak, 341 Madison Ave., New York 17. During the show they will be available in the registration area. Hotel reservations may be made through the Packaging Exposition Housing Bureau, 16 Central Pier, Atlantic City, N. J.

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YOU CAN SOLVE WITH

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### TUBULAR PAPER PACKAGING

For a package that's rugged . . . or attractive . . . or both. If money means nothing or if every penny counts . . . remember, NIEMAND BROS. TUBULAR PAPER PACKAGING can do the job better! Available plain or printed—with decorative papers and with paper, metal or plastic closures.

Illustrated literature showing many interesting tubular package applications, available on request.

**NB**

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*Manufacturers of Paper Tube Products*

37-01 Thirty-Fifth Avenue • Long Island City 1, N. Y.

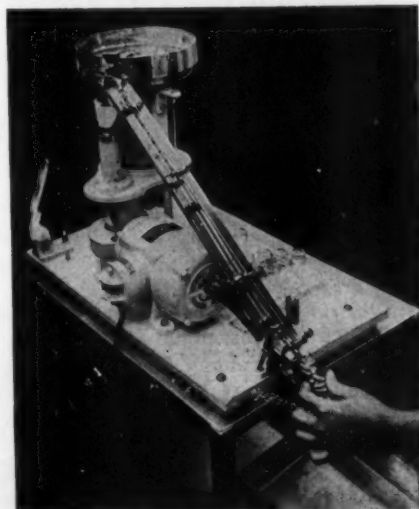
A Niemand Bros. "Packaging Engineer" will be glad to consult with you on your Package problem.

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### Tablet-capsule counting and filling machine

**Comes complete . . .  
no additional parts  
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1. Adapts to more counting-filling jobs than any other machine available . . . fills into any container!
2. Changeover time from item to item: approximately 5 minutes.
3. Will stack lozenges and tablets of all sizes.
4. Standard machine, with no extra parts, is capable of counting and filling uncoated tablets from 3/16" up . . . capsules from No. 5 to No. 000 . . . coated tablets from 9/32 to 19/32 inches.
5. Unmatched for ease of operation and clean-up.



Why not write today for descriptive brochure.

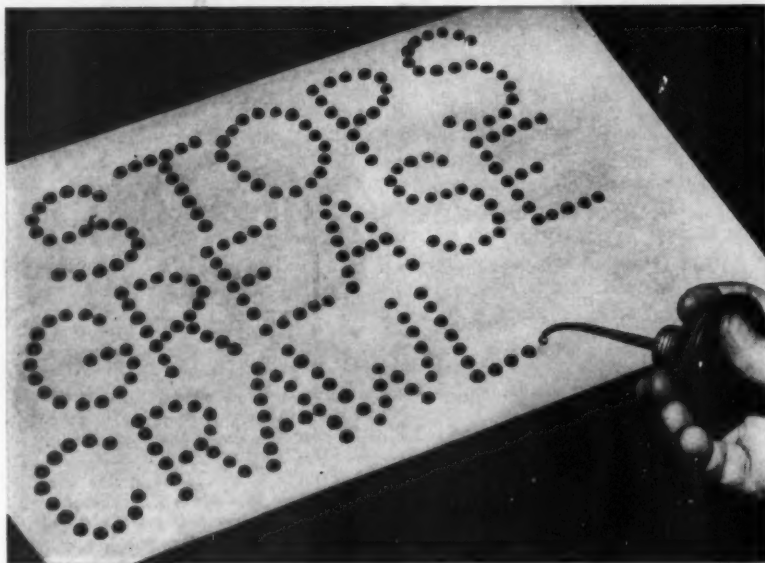
### THE BURNET COMPANY

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Established 1939

Sole U.S. and Canada distributor of Rotax

# Astonishing new PATAPAR®



## ...gives positive control of grease and oil penetration

This unretouched photograph tells the story of the "non-penetration" qualities of new types of grease-proof Patapar Vegetable Parchment. Drops of oil placed on Patapar remain on the surface INDEFINITELY. The oil does not spread or "crawl." It does not seep through.

These special Patapars offer a revolutionary way to package products having internal or surface content of grease, fats, oils. Their effectiveness has been proven with bacon, lard, shortening, margarine, ham, oiled machine parts and many other products.

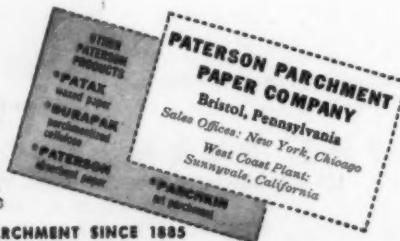
### Patapar gives you WET-STRENGTH, too

The new grease-proof Patapars have the same high wet-strength that is inherent in all the many different types of Patapar Vegetable Parchment. *This wet strength is sure and permanent.*

**In your business** — Perhaps the unique qualities of Patapar will be an economical solution to a problem in your business. Tell us the problem. We'll send information and samples of the type of Patapar we recommend. Why not write today?

**Patapar.**  
Vegetable Parchment  
HI-WET-STRENGTH • GREASE-RESISTING

HEADQUARTERS FOR VEGETABLE PARCHMENT SINCE 1885



## Toy packs

[Continued from page 119]

carries an animated illustration of Pinky playing the game, printed in four colors which stand out strikingly against the wood-grain printing of the rest of the box.

Ideal's Danger Patrol, a friction motor truck with screaming siren and flashing red light, equipped with complete emergency equipment in miniature, was previously packaged in a simple printed box which Ideal has replaced with a white-faced, patent-coated kraft board box that can be elaborately printed. The box becomes a permanent garage for the toy and provides an attention-getting setting for the truck on the counter. When open, the self-display riser cover promotes the toy. When closed, it looks like a garage door. The exterior of the box is designed to simulate red brick with a green roof, interspersed with realistic danger signs. The inside die-cut platform is printed in a black-and-white tile pattern to represent the garage floor. Snap-bottom construction provides a sturdy base for this relatively heavy toy.

Ideal has been a leader in the adoption of box designs that simulate luggage, many of them complete with luggage-type carrying handles and metal locks. These packages have been successful for a number of items from dolls and musical instruments to inflatable play pools.

The company's popular Betsy Wetsy doll this year was presented in a luggage-type case of set-up box construction with an outside printed tweed design in brown, red stitched binding and simulated travel labels printed in four colors. Airlines, railroads and steamship lines were contacted for permission to reproduce their insignia on the realistic cases. A new third-dimensional attraction was added to the inside of this year's case—the effect of a miniature home-laundry room with an actual clothes line on which the child may hang the doll clothes with real clothes pins. This design arrangement gives added attraction when the box is opened for display.

A less elaborate construction was used for a luggage-type package for the company's "Hiawatha" inflatable vinyl pool. In this case the handle is made integral with the white-

# All-new BLISS bodymaker has 450-a-minute speeds!



**Compact NEW design  
speeds changeovers  
assures dependable operation**

## These modern Bliss features step up production, step down costs

- Compact table with no idle station means no wasted space
- Actuated in-and-out knurler provides more even solder flow
- Notcher, double-action edger are quickly and easily adjusted
- Cam-actuated overhead blank lock and fixed forming horn assure perfect control of blank and can body
- Overhead can carrier drive permits easy accessibility to solder attachment
- Solder pot is adjustable, quickly and easily removed
- Inside or outside seam solder attachments are available

One of the industry's fastest, the new 403 Bodymaker is capable of 400 to 450 per minute *shift-after-shift-after-shift*. And here's why. Short-stroke, short-length cranks permit higher speeds; well-balanced components combined with Meehanite construction practically eliminate vibration. In addition, all adjustments are accessible, quickly and easily made which lessens downtime. Simple to set up, the 403 is readily adaptable to #202 to #404 plain, lacquered or lithographed sanitary can bodies.

The 403 is the latest in Bliss' new line of automatic, high-speed can machinery . . . including the 8-station, round can flanger; a wider, faster, quick-to-set-up scroll shear; and Bliss' already famous strip feed press. With more to come from the new can plant at Hastings (Michigan), you'd be wise to keep your eyes on Bliss.

Meanwhile, why not learn more about the 403 Bodymaker and other Bliss can machinery by writing to—

### NEW CATALOG NOW AVAILABLE

For complete details on the 403, and other Bliss bodymakers, write today for Section 3, Catalog 36-B.

E. W. Bliss Company: General Sales Office, 50 Church St., N. Y.  
CAN MACHINERY DIVISION: HASTINGS, MICHIGAN

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*is more than a name . . . it's a guarantee*

BLISS CAN AND CONTAINER MAKING MACHINERY



SLITTERS



BODYMAKERS



FLANGERS



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TESTERS

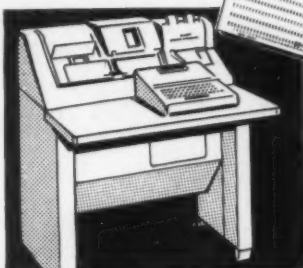


STRIP FEED PRESSES



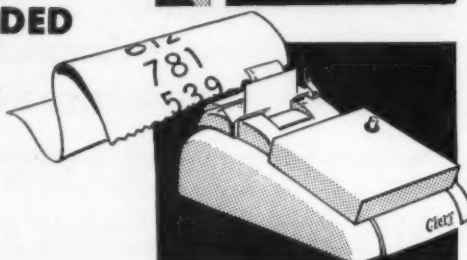
# New REMOTE WEIGHT RECORDS

## TABULATED



Weight data can now flow automatically into card punch records from a remotely located scale... An IBM Model 526 is shown as the receiving unit.

## ADDED



Weight records can be transmitted to an adding machine and printed on the tape and inserted tickets with ability to totalize weight on the tape. Cletr Model 1972 shown.

## DIGITAL INDICATION



A completely new concept of weight indication! From a remotely located scale, illuminated digital weight-indication is obtained.

## by TOLEDO ELECTRONIC WEIGHT CONTROL



The weight indication passes through a Toledo digital scanner and electronic counter and translator to provide an accurate signal that operates these remote devices to bring weights anywhere in the form most useful to you.

Through Toledo's new electronics system of remote data handling, weight data is no longer limited as to form, or close proximity to the point of origin. Weights can now go anywhere... and appear in tabulated, added, recorded, or digital-indicated form. This greatly

extends the capabilities of TOLEDO-mation throughout production, and assures maximum cost control accuracy.

*What is your weight control problem?* Write for bulletins on new Toledo remote digital-indication and recording.

Toledo Scale Co., Toledo 1, Ohio.

# TOLEDO® HEADQUARTERS for SCALES

faced, patent-coated kraft box, which is of envelope-tuck construction, printed in red, yellow and blue with stitched red binding and handle.

Every packaging idea at Ideal is given the most careful scrutiny by top management, to get the most effective merchandising aid. The results show that original and sales-compelling effects can be achieved, even at comparatively low cost, with proper design thinking.

**Credits:** Package design program by Alan Berger, 67 Irving Pl., New York 3. Folding box constructions engineered by Saul Saveth, 216-20 27 Ave., Bayside, N.Y. Folding boxes for Danger Patrol, Pinky Lee golf and basketball games, and Hiawatha Pool by Hygrade Folding Box Corp., 9200 Atlantic Ave., Wood Haven, N. Y. Betsy Wetsy luggage case by Lemberger Paper Box Corp., 341 Reid Ave., Brooklyn.

## Reed appointment

Appointment of R. Chester Reed of New York, a veteran executive of The Texas Co., as Deputy Director of the Containers and Packaging Div. of the Business and Defense Services Administration has been announced by the U. S. Dept. of Commerce.

Mr. Reed, who is supervisor of packages and shipping for all Texas Co. plants in the U. S., is on loan to BDSA for six months. He has been identified with many improvements in the field of petroleum products in a period witnessing the major transition from wooden cases to paperboard shipping containers and the introduction of round, refinery-sealed motor-oil cans. In accepting this appointment, Mr. Reed brings to the agency a wide knowledge of the containers and packaging industry obtained over a period of more than 35 years.

Mr. Reed has been a director and vice president of the Packaging Institute, president of the N. Y. Division of the Society of Industrial Packaging and Materials Handling Engineers and a director of the national organization, and a member of the Package Planning Council of the American Management Assn. He helped organize the Petroleum Packaging Committee of the Packaging Institute and was its first chairman. He was chairman of the Joint Government-Industry Subcommittee on Petroleum Packaging at the time of his appointment by BDSA.



# Q: What package caser cuts manhours up to 70%?



"Sure-Way" Caser at Western Frozen Foods, Watsonville, Calif.

## A: The amazing

## SURE-WAY PACKAGE CASER

### TYPICAL USERS

American Home Foods, Inc. — Spaghetti dinner  
The Andrew Jergens Company — Soap bars  
C & H Sugar Refining Corporation — Sugar  
General Mills, Inc. — Prepared mixes  
Libby McNeill & Libby — Frozen foods  
Mariani Frozen Foods — Frozen strawberries  
M. J. B. Co. — Rice and tea  
Rosenberg Bros. & Co., Inc. — Prunes  
Sun Maid Raisin Growers of California — Raisins  
West Coast Growers & Packers, Inc. — Raisins  
Patterson Frozen Foods — Frozen foods  
Cedergreen Frozen Pack Corp. — Frozen foods  
Western Frozen Foods — Frozen foods

*...and here's why* "When we installed our 'Sure-Way' Caser a year ago, we were able to re-assign seven people to other jobs who had previously worked on our manual casing line," says O. L. Moulthrop, Western's vice president in charge of production.

With the "Sure-Way," a single operator positions the empty case—the rest is automatic: conveying and aligning packages, elevating and tiering, loading case and lowering to the discharge belt, ready for sealing. All this at speeds up to 240 packages a minute! Cases virtually any product in a rigid or semi-rigid container, or product that takes a rigid shape. Many other cost-saving features are exclusive with the versatile "Sure-Way." Write today for all the facts.

### FREE NEW BULLETIN

—just off the press, fully describes the "Sure-Way" Caser—mail today!



### FOOD MACHINERY AND CHEMICAL CORPORATION

P. O. Box 1120, San Jose 8, Calif., or  
103 E. Maple St., Hoopeston, Ill.

☐ Please send me your Bulletin on the "Sure-Way" Package Caser.

☐ Have your representative call. 532-12

Name \_\_\_\_\_ Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Product(s) \_\_\_\_\_



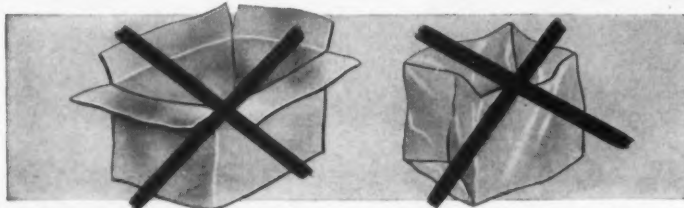
## FOOD MACHINERY AND CHEMICAL CORPORATION

### Canning Machinery Division

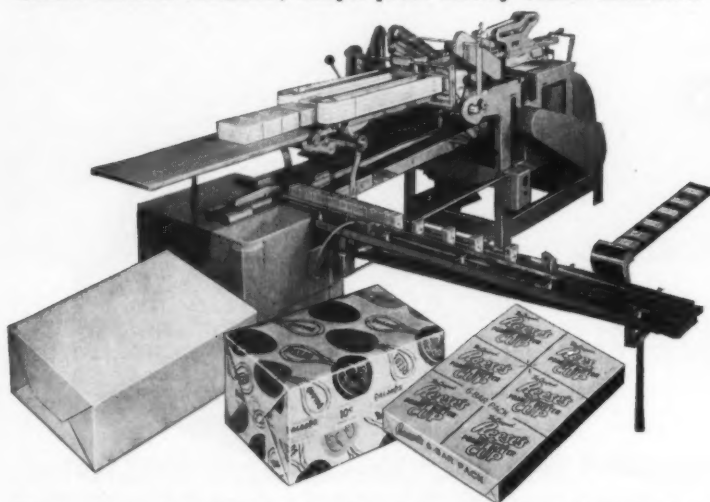
General Sales Offices:

WESTERN: SAN JOSE, CALIF. • EASTERN: HOOPESTON, ILL.

# ACCUMULATOR and BUNDLER solves outmoded packaging



If you are still using expensive bulky heavy cartons and loose-fitting bags to gather your smaller packages into one larger unit, we can cut your costs with the new all-automatic Accumulator and Bundler. Eliminate carton and bag cost and inventory. Save on labor, hand filling and handling costs. Give your products a more secure modern container, tamper-proof factory sealed assurance.



Hayssen Accumulator and Bundler gathers from a single line feed any number of individual rectangular, tapered or cylindrical packages into a neatly stacked arrangement and automatically overwraps them with paper, film or foil, as you desire, into one tight, easily handled, protective bundle.

Manufacturers of the following products are today saving with Hayssen Automatic Accumulating and Bundling: Books, Matches, Butter, Bird Seed, Boxes of Screws, Nails, Tacks, Beans, Ice Cream, Candy, Confections, Cheese, Cough Drops, Cookies, Dessert Mix, Dried Fruits, Raisins, Cosmetics, Drug Items, Gelatin, Rice, Frozen Food Cartons, Soup Mix, Tea, Tapioca, Toothpaste, Toilet Tissue, Yeast and many others.

You, too, can cut costs with Hayssen Accumulating and Bundling. Open your ledger to Carton and Bag purchase, inventory and hand filling costs . . . then call Hayssen. We know we can save you time and money, and produce a better package for your distribution.

*Let our Packaging Engineers help you with your packaging problems. WRITE US TODAY for further information.*

## **Hayssen** MFG. COMPANY

Since 1910, Manufacturers exclusively of packaging and wrapping machines.

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Atlanta • Boston • Chicago • Dallas • Denver • Detroit • Los Angeles • Minneapolis  
New York • Philadelphia • St. Louis • San Francisco • Seattle • Montreal • Toronto

## Hosiery survey

[Continued from page 98]

the machinery can be kept in full-time operation. Another stumbling block is the fact that all socks and stockings still must be hand folded; no machinery has yet been devised to do this operation efficiently by mechanical means.

Reportedly, experimental runs are being made on standard cellophane wrapping machines, similar to those used for other types of textile wrapping with roll-fed cellophane wrapped around the stockings folded on a backer card. No special adjustments to standard equipment are necessary except adaptation to the size of the wrap and placement of sealing bars to prevent touching the stockings during the sealing operation.

Automatic packaging would mean a tremendous savings in labor over present methods of loading the folded stockings into cellophane envelopes if the packages can match the appearance of cellophane envelope packages.

Whatever the type of package and whatever the market, there is definitely renewed interest in improving all types of hosiery packaging to meet today's retailer requirements, to withstand the hurly-burly of today's shopping and to present the merchandise in a manner that dramatizes it to best advantage before the eyes of the customer.

## Multi-pack experiment

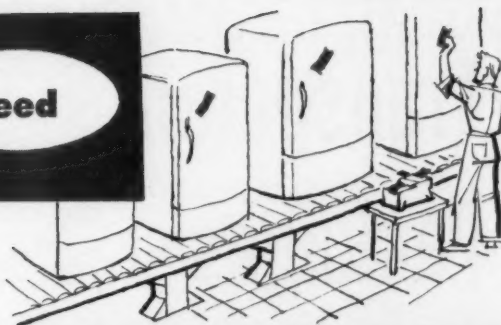
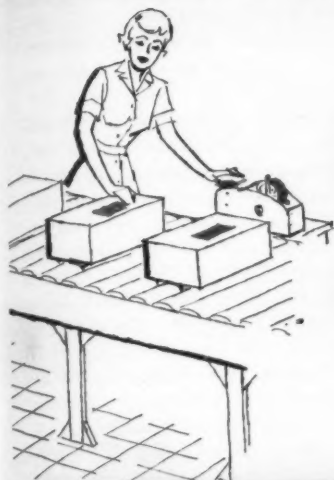
The National Canners Assn. is conducting an experiment in multiple packaging of canned foods to determine whether consumers accept multiple packaging, what size package is most acceptable, the savings in time for the retailer in price marking and shelf stocking, what sales results can be expected from multiple packaging and what size stores can best use multi-packs.

Cooperating with NCA is the Container Corp. of America, which is supplying cartons for running store tests on five products in seven American Stores supermarkets which have been made available to NCA as a laboratory.

Products from the categories of canned vegetables, fruits, milk, soup and fish have been selected for testing in this experiment.

for individual hand feed

Without Water, Glue, Heat or Mess



or automatic high speed

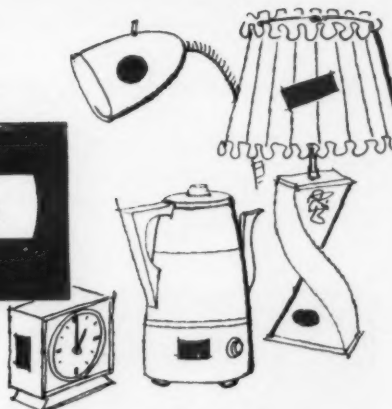
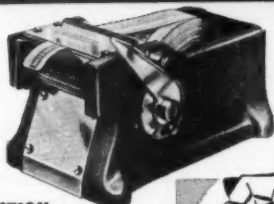
Free from Curl-Up, Spoilage, Waste or Delay

on all

smooth

surfaces

Glass, Wood, Ceramics, Metals, Plastic or Cellophane



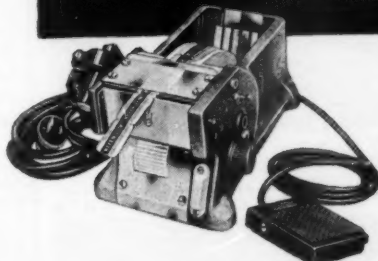
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#### GET FASTER PRODUCTION...

lower costs . . . better results with pressure-sensitive labels from the Roll Label Printer of your choice. He has the specialized equipment and "know-how" to help you solve your labeling problems . . . he can design and print labels that sell! Call him any time for low-cost, high-impact labeling on your product or package.

#### FREE! TEST-IT-YOURSELF KIT

Contains a selection of pressure-sensitive samples for on-the-spot testing in your own plant. Write today!



ROLL

DISPENSED

Pressure-Sensitive LABELS

"World's fastest known hand labeling method" — that's the combination of roll-dispensed pressure-sensitive labels plus specially designed dispensers. Available through your Roll Label Printer in automatic, semi-automatic, or hand operated models to fit every application.

**KLEEN-STIK PRODUCTS, INC.**  
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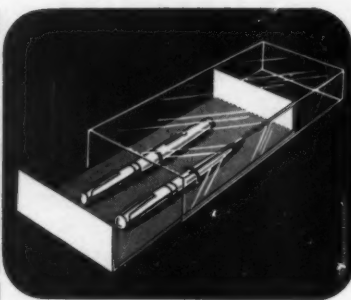
Pioneers in Pressure Sensitives for Advertising and Labeling



# Transparent Packages by

## TRAND

### PLASTICS COMPANY

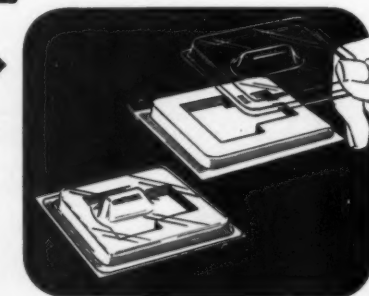
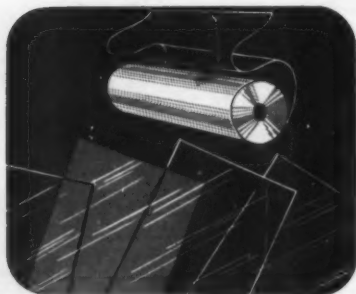


#### Transparent sleeves

From our own acetate or butyrate sheet . . . plain, printed, or silk screened . . . ideal with colorful paperboard trays or our own vacuum-formed plastic trays. Shipped flat, easy to pack, easy opening and reclosure for consumer inspection.

#### Vacuum-formed packages ▶

Formed from our own acetate or butyrate sheet in a variety of original designs with paperboard or plastic back.

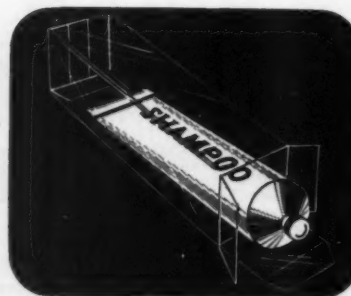


#### ◀ Extruded sheet

Acetate or butyrate sheet, transparent or opaque, extruded to your specifications.

#### Transparent cartons ▶

We can supply them by the thousands or by the millions. Acetate or butyrate, printed or plain . . . shipped flat, they set up quickly and easily to provide an inexpensive rigid transparent package for maximum product display.



#### Poly-lined tubes

[Continued from page 85]

to round out the important barrier requirements for polyethylene would be vinyl, saran and nylon.

The coating used in the tubes for Surfacaine ointment and for Esso products is believed to be a special formulation of vinyl, although the producer of the tubes has not actually identified the formulation that is being used.

One factor that is difficult to evaluate at this time is the matter of cost. The packager naturally wants to know how the cost of coated polyethylene containers will compare with the cost of other packages that might do the job. One user has been quoted a price for a small lot of color-printed coated 8-oz. tubes approximately the same as that of an aluminum tube of the same size and expects that in volume the polyethylene tube will cost less.

The conventional unlined polyethylene tubes—which, reportedly, cost about 16% less than the lined version—have enjoyed impressive growth in the last year in the packaging of certain products, including adhesives, personal products and specialty products such as plant foods and finger paints.

The use of an internal coating, however, presents new problems, for linings must necessarily be very thin and, generally, they must be offered in a range of formulations to meet specific needs. In the case of linings for tubes, there is an additional problem because of the heat seal, which might cause the lining to be weak at the point of seal and give way altogether during the periods of shelf life or use.

Such problems are always challenging to overcome and rewarding when solved. There is no reason to think that solutions will not be found for the difficult problems in this case.

**Credit:** Internally coated "Bacon" tubes for Eli Lilly and Esso by Bradley Container Corp., Maynard, Mass.

**CORRECTION:** Design Associates, Ltd., New York, should have been credited for design of Cerene packages by Brace Pharmaceutical, Inc., illustrated in Packaging Pageant, MODERN PACKAGING, Jan., 1956, p. 123. Sorry for this omission.

# TRAND

40 BELDEN AVENUE

"THE TREND IS TO TRAND"

## PLASTICS COMPANY

NORWALK, CONNECTICUT



# STEIGERWALD

## SENSI-STICK

### LABELS

Pressure Sensitive

Easy as 1, 2 to Apply!

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GLUE!

NO  
CLEANUP!

PERMANENT  
OR  
REMOVABLE

#### Easy to Apply . . . Sure to Stick!

Gone is the glue pot! Gone is water! Steigerwald Sensi-Stick pressure sensitive labels eliminate forever old-fashioned start-up and clean-up labeling machine jobs.

Sensi-Stick simplifies labeling to a 1, 2—pick and stick quick way—Individual labels or Dispenser automatically feeds individual labels on a tape ready for rapid application.

#### Economical — Faster Better for all surfaces

Steigerwald Sensi-Stick labels hold securely on all surfaces—won't buckle, curl or rub off even where others fail and nothing else will hold—choice of permanent or easy-to-take-off, surface safe adhesives.

#### Beautiful designs

Reproduce your present label just as it is on Sensi-Stick or consider a new design with a choice of gold or silver foil; embossed; lustrous papers and sparkling inks to add an extra note of quality to your product. Use Sensi-Stick to show you the way to the world's fastest hand labeling operation.



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**Consult us**—Present your packing problems to us for complete package engineering design and service by experts. We will show you how to improve package performance and save money too!

WRITE, WIRE, OR PHONE US

**AMERICAN EXCELSIOR CORPORATION**

1000 N. Halsted St., Chicago 22, Illinois

**NATIONWIDE SALES & DISTRIBUTION**

**Gift tip for '56**

[Continued from page 83]

of cutlery—steak knives, carving sets, stainless steel flatware—in presentation boxes of plastics, leatherette and wood.

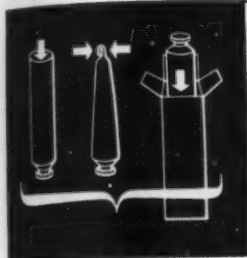
Confectionery counters at Christmas time were a revelation in package creativeness to attract the gift shopper. There were foil-covered molded-pulp containers representing splits of champagne, but holding non-alcoholic liqueur-filled chocolates; boxed foil-wrapped chocolates in the form of tree ornaments; containers of folding-box construction with moving slides that operated pictures in a frame creating the illusion of a television screen; foil-covered trays and transparent covers to show off such confections as sugar candies made in the form of dolls of different nations. There were cone-shaped folding cartons printed to look like Santa Claus, even cartoned chocolate remembrances that can be mailed, like greeting cards put out by Barton in designs for leading holidays and occasions throughout the year.

Even key-opening tins for salted nuts and candies have been prettied up with colorful lithography in smart designs to make them more attractive as gift items.

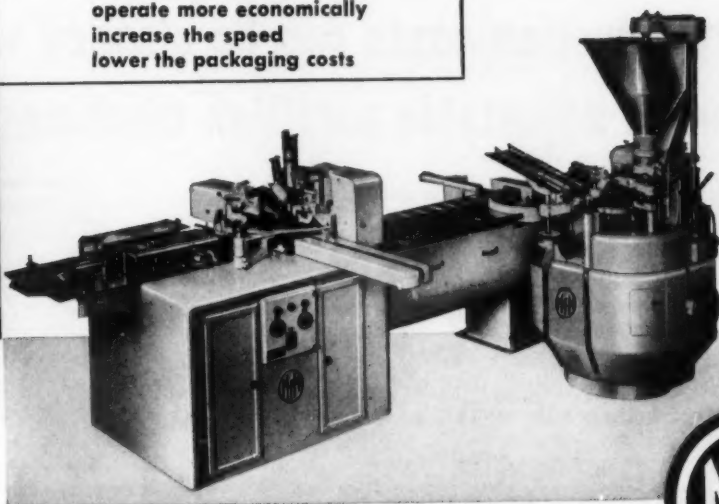
The hosiery industry has rapidly become gift-package minded. Many leading brands now supply some kind of gift sleeve or folder for the retailer to slip over the regular package when a purchase of two or three pairs of stockings is made as a gift (see "Hosiery," p. 94, this issue). Because of the number of sizes, shades and styles, it is not feasible for the hosiery manufacturer to affix them himself to the regular box. He must therefore rely on the retailer to add the packaging flourish he supplies with the stockings. And apparently most stores are willing to do this because it helps to push stockings as glamour items.

Most experienced gift packagers of all are the perfumery houses, about 85% of whose business is done on purchases made for gift giving. And one of their mainstays is the creative package presentation. Packagers in many fields, it is believed, can learn something from the illustrations on these pages showing 12 packages which leading cosmetic firms have told MODERN PACKAGING

**MfM Combi-Plants**  
operate more economically  
increase the speed  
lower the packaging costs



The machine, as illustrated,  
fills, closes and cartons  
collapsible tubes in one  
passage  
Operated: by 2 person



**We deliver:** Fully automatic groups of synchronized machines for the packaging of tubes, rollfilms, shaving sticks, spark-plugs, pharmaceutical products, drops, biscuits etc.  
Fifty years' experiences are the basis of our Manufacturing Programme.



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Correspondent's Office: H. J. Jensen, 350 Broadway, New York 13, N. Y.

## put reprints to work!

Reprints of articles, features and news items that appear in Modern Packaging are often surprisingly inexpensive when ordered in quantity. Many companies make it a practice to have stories which have a bearing on their business reprinted for distribution to their own personnel, customers, prospects, stockholders or to other interested groups.

Whenever you see editorial matter of this type in Modern Packaging magazine or the Encyclopedia issue which you can use in reprint form, in quantities of 100 copies or more, write and quotations will be furnished promptly.

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POLYETHYLENE  
BAGS  
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LINERS**

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Made from only the best films available, to avoid rupturing. PAR-PAK bags will withstand any normal strength test.

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There's no sacrificing of thickness-for-cost at PAR-PAK! Thicknesses are guaranteed, within standard tolerances.

#### PRINTED OR PLAIN—TRANSPARENT

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#### PAR-PAK SERVICE IS TOPSI

Many sizes in stock for immediate delivery. Size range—1" to 40" wide, 1 1/2" to 96" long, .00125" to .006" thick.

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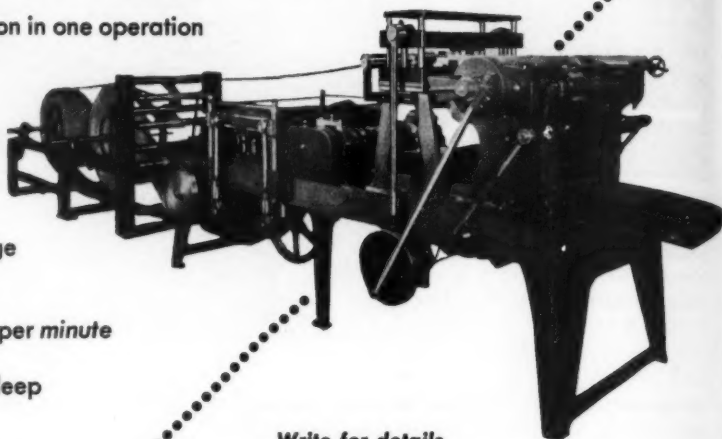
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A vastly superior foot-powered sealer for heat-sealing polyethylene, pliofilm, etc. Offers these important features: • Ventilated Teflon Strips that prevent material sticking to jaws • Accurate Thermostatic Control • Dial Indicating Thermometer • 12" Sealing Jaws • Brand New Design, including sturdy metal stand.

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Complete  
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### Career for a PACKAGING ENGINEER

The Engineering Service Division of du Pont's Engineering Department has one responsible position immediately available for a graduate engineer with three to ten years' experience in the packaging of bulk and liquid products. Qualifications should include engineering knowledge of metal drums, fiber drums, multi-wall paper bags, and bulk shipping containers and cartons. Familiarity with bulk and liquid filling and packaging machinery is desirable.

The successful applicant will provide consultation in the selection and use of packages, shipping containers, and packaging machinery, and will be expected to develop and execute major engineering programs in the industrial packaging field.

Please send complete resume, including details of education and experience, to:

**MR. J. C. COSTELLO, JR.**  
Engineering Department

**E. I. du Pont de Nemours & Co., Inc.**  
Wilmington 98, Delaware



were their top sellers for the 1955 holiday season. Each of them, apparently has just what it takes in prettiness, humor, imagination or whimsicality to capture the shopper's fancy.

#### Something for the boys

A new area where gift-packaging presentations are moving in fast is that of men's apparel and accessories. Notable successes have already been made with the packaging and merchandising of men's jewelry as fashion items by such firms as Swank, which has helped to boost sales in this field to something like \$40,000,000 a year.

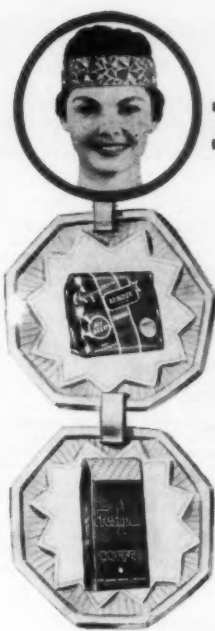
Now the makers of apparel are looking to the package to help popularize the fashion appeal of the growing list of casual clothing for men. Among the leaders is McGregor which has a whole line of colorfully packaged items for spring, directed to women shoppers looking for Father's Day gifts.

Among them is an ensemble of slacks, shirt and socks designed for outdoor living called, "Picnic for Pop," in a colorful box decorated with airplane labels. A transparent window box made to represent a golf bag, complete with handle, holds a golf jacket. Even striped knit sport shirts are being put in transparent printed acetate tubes that display the merchandise and make a handsome popular-priced gift item.

Other items such as swim trunks and sweaters are being given new impulse appeal as gifts with imaginative packaging.

Never in the country's history has merchandise of all kinds been presented more luxuriously—all because of the package. Every manufacturer, whether he likes it or not, must do his utmost to keep in step with the trends. Says a successful leader in the liquor field, where some may feel that glamour packaging is getting a little out of hand, "I think it's a good thing psychologically, even if we don't know what to do next. It's good just to know we can plan in an economy where people want and can buy more of the pleasing extras that decorative packaging affords."

**CORRECTION:** Hinde & Dauch, Sandusky, Ohio, not the Robert Gair Co., is the supplier of the Cresca Co. Taster boxes described in the December issue of MODERN PACKAGING, page 105.



# neida

**SYMBOL OF  
QUALITY PACKAGING**

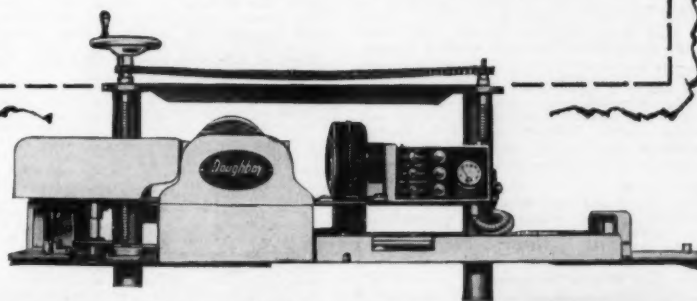
The Oneida trademark has always been a sign of unparalleled quality. It stands for the ultimate in product protection and sales appeal. That's why for over a quarter of a century Mrs. Consumer has been reaching for Oneida-packaged merchandise. Check Oneida today.

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paper products, inc.

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**THIS AD ENTITLES YOU TO  
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That's right—we'd like to show you a fast, neat job of heat sealing... done on your product with the Doughboy Continuous Band Sealer. This heavy-duty sealer is ideal for sealing polyethylene or cellophane bags, fabricating large-dimension liners.

Send us samples of your bags and product for sealing tests today. And if you use bag toppers on cellophane, we'll also show you how another new Doughboy product—the *Sealer-Labeler*—can heat-seal and label your product in one automatic operation!

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**DOUGHBOY INDUSTRIES, INC.**  
Mechanical Division  
New Richmond, Wisconsin

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FOR SALE: Box machines; Packaging machinery; Fillers; Mixers; Labelers; Cappers; Case Sealing Equipment; etc. What idle equipment do you have for sale? Consolidated Products Co. Inc., 61 Garden Street, Hoboken, N. J. HO 3-4425. New York Tel: BA 7-0600.

### WORLD'S LARGEST STOCK OF WRAPPERS

Rebuilt and guaranteed. At great saving. All types and sizes of wrapping machines now available for immediate delivery. High speed Pneumatic Seal Packaging Unit consisting of Carton Feeder and Bottom Sealer, 2—Two Seal Weighers, Top Sealer with Compression Drying Unit, Glue Tight Wrapper, Interconnecting Conveyors. Package Machinery FA4, FA3, FA2, FA Wrappers, with and without Electric Eye. Hayssen 3-7, 7-11, 8-18 Automatic Cellophane Wrappers. Hudson Sharp Campbell Model 2W6 Cellophane Wrapper. Oliver Model 799-J Wrapper. Stokes and Smith Transwraps. Peters Carton Forming and Lining Unit. Standard Knapp 429 Automatic Carton Sealer. Coo Carton Sealer. Tell us your requirements. Write, wire, phone collect today.

Union Standard Equipment Company  
318-322 Lafayette Street  
New York 12, N.Y.

FOR SALE: Slitter and Rewinding Machine manufactured by Paper Converting Machine Co. Maximum web 40 inches 2" to 12 finished rolls front end roll fitted with shear slitter grooves 3/4" spaced cut-off knife and tucking blade 600 feet per minute back stand capacity 36" roll motor 1 H.P. 1800 R.P.M. 220 or 440 volt. Hutchins Industries, Inc., Eau Claire, Wis.

FOR SALE AT A GREAT SAVING: ABC Model XST fully automatic Case Sealer, Serial No. 2185-4820 with a 6 ft. compression unit. Capacity 5 cartons per minute, AC 1-60-220. This unit was purchased new in 1953 but has actually had only one year of service and has recently been re-checked and overhauled and is in practically new condition. May be inspected in Miami under operation. Wire or write: Stiles Conveyors and Transmissions, 596 N. W. 34th Street, Miami 37, Florida.

FOR SALE: One Model 12 Packomatic Carton Sealer, complete with automatic carton feed, overhead and connecting conveyor and telescoping volumetric filler available for immediate delivery. Further information available from: The Paul Moore Company Limited, 7357 Sherbrooke Street West, Montreal, Quebec, Canada.

FOR SALE: 2 used Colton single punch tablet presses, \$300.00, each unit. 1 used Colton steel mixer, 26-gal., including motor drive and starting switch, \$300.00. Box 282, Modern Packaging.

### FOR SALE

One (1) Model #56 Packmaster Spot Seal machine, complete with counting mechanism, adjustable guides on front and 4" rear table, ready for operation on 220 V, 60 C, 3 H.P. current.

Box 286, Modern Packaging

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## Machinery and Equipment Wanted

WANTED: Pneumatic Seal Packaging Line, Capper, Labeller, Cellophane Wrapper. P. O. Box 1351, Church St. Station, New York 8, N.Y.

WANTED: Simplex 8-7 and 7-24 Automatic Bag Making Machine. Advise full particulars. Box 288, Modern Packaging.

WANTED: Simplex Bag Machine Model 1 or Model 4. F. A. Richter, Saran Dept., 1220 N. State St., Chicago 10, Ill.

## Help Wanted

MACHINE DESIGNER: Flexible bag packaging machinery manufacturer has opening for an experienced engineer capable of designing complete machines. Top pay, insurance, vacations. Excellent opportunity and room for advancement. Located in excellent midwestern city. Our employees know of this ad. Box 277, Modern Packaging

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Wanted by well-established, progressive vacuum forming and transparent sheet fabricating organization, carrying a most versatile line of transparent packaging, vacuum and pressure formed articles (industrial parts, displays, bubble packs, etc.), transparent protective envelopes, job card holders, etc. Agents carrying other packaging lines or calling on manufacturers needing better display merchandising through transparent or contour packaging, will open great new markets along their present lines. Commission basis. All replies strictly confidential.

Plastofilm, Inc.  
Wheaton, Illinois.

SALESMEN WANTED: Flexible packaging. Leading Eastern converter and printer of cellophane and polyethylene has two openings. One man for Metropolitan N.Y.C., the other for the Chicago area. Salary and commission. Active accounts and leads furnished. Replies will be held in strictest confidence. Our salesmen know of this advertisement. Box 280, Modern Packaging.

SALES AND TECHNICAL SERVICE: Leading manufacturer in metal container field has openings for salesmen with some technical savvy to call on petroleum, petrochemical and chemical industries in mid-west and south-west. Fine opportunity for keen men with drive in company with international subsidiaries which is presently expanding its operations. Travel necessary. Car provided. Salary and expenses. Write giving complete personal and business background. Interview will be arranged at convenience of applicant. Box 281, Modern Packaging.

MACHINE DESIGNER: Leading manufacturer of dairy packaging equipment, Midwest location, has opening for experienced engineer capable of designing complete machines. Good pay, bonus plan, insurance, paid vacations, and opportunity for pleasant, satisfying long-time association. Box 278, Modern Packaging.

MANUFACTURERS AGENTS: Ohio manufacturer of polyethylene bags and liners, all sizes, printed and plain, desires aggressive agents in several territories, especially Illinois, Michigan, Wisconsin. Others open. State territory covered and present lines. Box 283, Modern Packaging.

PACKAGING MACHINERY ENGINEER: Established Los Angeles manufacturer of Heat Sealing Machinery selling National and Foreign markets has opening for a competent mechanical and electrical engineer. Must have thorough knowledge and broad experience in packaging industry. Excellent opportunity for qualified man. Give complete record of experience and references, also starting salary. Address A. T. Alden, P. O. Box 288, Calver City, Calif.

### LITHOGRAPHIC JUNIOR EXECUTIVES

Experienced—to locate in Massachusetts. 1. Assistant to a President—with thorough knowledge of lithographic methods and ability to handle personnel. Excellent opportunity for future advancement. 2. Estimator—to handle either carton or label estimating. All inquiries will be treated in strict confidence. Established 1889 as Brooks Bank Note Co.—Lithographic color manufacturers of labels, cartons, greetings cards and box wraps. If interested, address:

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140 Wilbraham Avenue  
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## Situations Wanted

PACKAGE ENGINEERS: B.S., B.S.F., Chemistry, Wood Utilization, and Business Administration. Five years diversified experience in package development, methods, materials, specifications, package evaluation and testing. Developed and produced display and protective type packages for all types of commercial products. Interested in industrial packaging or materials industry. Will relocate. Box 285, Modern Packaging.

MFRS. AGENT—REPRESENTATIVE AVAILABLE: Desires connection with high grade companies in fields of packaging materials, such as paperboard, folding cartons, shipping containers, plastics, foils, laminates. Chicago area and midwest. Excellent market contacts and experienced in all phases of packaging. Box 284, Modern Packaging.

PACKAGING ENGINEER: 9 years experience. College. Excellent design record all types consumer products; protective and display packaging; commercial, military. Heavy experience in fibre box, cosmetic, electronic industries. Up to date knowledge of materials and methods. Quality Control, Purchasing, Administrative experience. Desire staff position New Jersey—New York area preferred. Box 287, Modern Packaging.

## Miscellaneous

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PLANT AVAILABLE: Complete film and sheet plant available in Canada. New equipment in specially constructed building includes 4½ Hartig (Polyethylene or acetate); 27" special Banderra (polystyrene); Dusenberry 42" aluminum. All complete with d-i-a, pelletizers, take-offs, grinders and essential supplementary equipment. Consider parcelling machinery and heat building. Box 279, Modern Packaging.

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Closing date: 10th of preceding month, e.g., February 10 for March issue

Up to 60 words ..... \$10.00	Up to 120 words ..... \$20.00	Up to 180 words ..... \$30.00
Up to 60 words (boxed) \$20.00	Up to 120 words (boxed) \$40.00	Up to 180 words (boxed) \$60.00

For further information address Classified Advertising Department,  
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Modern Packaging reserves the right to accept, reject or censor classified copy.

Another new development using

# B. F. Goodrich Chemical raw materials

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*...made from Geon Rigid Vinyl*



**T**HIS case for tableware made from Geon has a way of making customers for the product it packages. Modern styling displays the tableware to best advantage. Super strength and lightness are combined in the construction of paperboard sandwiched between two pressure-formed sheets of Geon rigid vinyl.

Sales appeal starts with the luxury styled finish—the look and touch of leather outside and satin glow inside. In the home the tough, abrasion-

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This case may suggest a package that will help to build a sales success for you, too. Geon polyvinyl materials for packaging include coatings, film, sealants, tape, barrier materials. Rigid Geon vinyl can be molded into clear, transparent, colored or opaque forms. For technical information, please write Dept. DQ-1, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco. In Canada: Kitchener, Ont.



*B. F. Goodrich Chemical Company does not manufacture these plastic cases. We supply only the Geon vinyl resin.*



GEON RESINS • GOOD-RITE PLASTICIZERS . . . the ideal team to make products easier, better and more saleable. GEON polyvinyl materials • HYCAR American rubber and latex • GOOD-RITE chemicals and plasticizers • HARMON colors



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